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WESTERN AUSTRALIAN IN-SERVICE TEACHER EDUCATION PROJECT

REPORT ONE

PERSPECTIVES ON IN-SERVICE TEACHER EDUCATION:

An overview of the literature and current provisions in W.A.

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and

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PREFACE AND ACKNOWLEDGEMENTS

The Western Australian In-Service Teacher Education Project is sponsored by the Western Australian Post-Secondary Education Commission.

Funds are administered by the Western Australian College of Advanced Education.

The Project Advisory Committee comprises:

Mr D. Briggs (Chairman, and a member of WAPSEC)
Dr M.L. Clark (nominated by WAPSEC)
Professor B.V. Hill (nominated by WAPSEC)
Mr P.W. Hill (nominated by the Education Department of W.A.)
Mr W.J. Vivian (nominated by the State School Teachers Union)
Mr R. Standish (Secretary and a staff member of WAPSEC)
(Dr W.D. Neal was chairman of the Committee until his retirement as Chairman of WAPSEC in July 1981.)

Project Director:

Dr M.L. Clark, Western Australian College of Advanced Education.

Research Assistant:

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Acknowledgement is made of the assistance given to the Project by individuals and groups whose information and advice made this review possible. In particular thanks are extended to Messrs E. Styles, Hal Symons and Barry Hepworth of the W.A. Teacher Development Branch; Tony Curtis and Graham Green of the

Catholic Education Commission; Humphrey Colquhoun of the Independent Schools Education Committee; and Vin Davis formerly of the Community Education Centre, Fremantle.

Special thanks are also extended to Mona Minekus for her dedicated work on the Word Processor in preparing the copy for this report, and to Graham Curtis and his staff for the reproduction and collation of it.

PART ONE : INTRODUCTION

1.0 ORIGINS OF THE PROJECT

Following the publication of reports by the Auchmuty (1980) and Vickery (1980) Committees of Inquiry into Teacher Education at the National and Western Australian levels respectively, the W.A. Post-Secondary Education Commission under the chairmanship of Dr W.D. Neal established a Teacher Education Working Party to examine the implications of the two reports, particularly as they might effect post-secondary education institutions in Western Australia.

One particular concern of this Working Party was that if in-service education activities were to be increased as a result of the major recommendations of the NITE (Auchmuty) and VICKERY Reports this would have serious implications for the deployment of resources. Thus it seemed essential to be well informed about the type of courses which should be made available to teachers to meet their most pressing needs.

It was understood that some information was available to employing authorities and to tertiary education institutions, on the needs of teachers for in-service training, but it seemed that no systematic assessment of these requirements had been undertaken. If such an appraisal could be made through a research project it would be helpful in planning in-service activities. Indeed the Working Party considered that such information could have relevance also for pre-service teacher education courses as institutions review the programmes they are offering. Consequently it was recommended to WAPSEC that it should initiate an appropriate study of teacher tasks and needs for in-service education. This was accepted by WAPSEC.

As a means of implementing the project and guiding its development a Project Advisory Committee was established under the chairmanship of first, Dr Neal, until his retirement from WAPSEC, and subsequently Mr D. Briggs, a member of the Commission. Invitations to join the committee were accepted by a nominee of the W.A. Education Department, Mr P.W. Hill (Research Branch), two nominees of Tertiary Education Institutions selected by the Working Party, viz. Professor B.V. Hill (Murdoch University School of Education) and Dr M.L. Clark (then Assistant Dean, Research, Planning & Computing Services at Churchlands College of Advanced Education), and a nominee of the State School Teachers Union of W.A., Mr W.J. Vivian (Principal, Phoenix Primary School).

At its first meeting, the Project Advisory Committee on behalf of WAPSEC invited Dr Clark to act as Project Director and it was agreed to seek an agreement with the Director of Churchlands College (subsequently a Campus of the Western Australian College after amalgamation of the four colleges of advanced education in W.A.) for the College to accept responsibility for holding the funds designated for the project.

An initial allocation of $6,000 for 1980/81 was made by WAPSEC with additional funds if necessary to be considered in the following year. It was hoped that the tertiary institutions might also be prepared to support the project as it developed.

2.0 AIMS & STRUCTURE OF THE PROJECT AND THIS REPORT

The major objectives for the study as conceived initially by the WAPSEC Teacher Education Working Party were that it should survey teachers and administrative personnel to identify:

i) The tasks that teachers perform in the classroom and in the school and the perceived relevance of their pre-service and in-service education experiences to those tasks; and

ii) The needs of teachers for various kinds of in-service education at key points during their teaching careers, and as circumstances evolve and change during this time.

As determined by the Project Advisory Committee, the project was structured initially as follows:

a) A literature search related to the scope and methodology of the project,

b) development of a working definition of in-service education,

c) development of procedures for collecting data relevant to the aims of the project,

d) data collection, analysis and review, and

e) follow up as necessary.

The following report covers a summary review of relevant Australian literature and some key overseas reports on in-service teacher education. It also provides an overview of current provisions in this field in Western Australia.

Trends in the definition of in-service education and objectives for it over the last two decades or so are reviewed first in the report. This is followed by a discussion of needs from various perspectives. Models which have been developed for in-service education are then summarised, and evaluation programmes and methods analysed. Finally an over-view of the in-service provisions of the State, Catholic Education and Independent School Systems in Western Australia is given together with a brief appraisal in terms of the trends evident elsewhere in Australia and overseas.

PART TWO : LITERATURE OVERVIEW

3.0 AUSTRALIAN STUDIES OF IN-SERVICE EDUCATION

There has been a considerable amount written about in-service education in Australia over the last few years, as may be seen from the bibliography provided with this project report. Two reports by Batten (1977) and Beck (1981), in particular, provide valuable reviews of the literature. National and State Inquiries into Teacher Education have also provided summary statements and recommendations about in-service education. In the following pages we have extracted information from these reports which seems relevant to the present project, and make reference to further material wherever it seemed useful. Thus we have tried to provide an up-date overview of pertinent matters.

4.0 AUCHMUTY & VICKERY COMMITTEE RECOMMENDATIONS

The Committee for the National Inquiry into Teacher Education "firmly endorses the concept that teacher development is a continuous process encompassing pre-service preparation, induction into the teaching profession and in-service activities" (Auchmuty, p.68).

In-service education was considered highly significant in relation to the basic principles of lifelong learning, new and emerging roles within schools, and the rights of children for effective education to the maximum level of their capacity. However it was found that the funding of Australia's in-service effort was inadequate, and the services themselves were poorly co-ordinated. Consequently it was recommended that the provision for in-service activities should be increased to cater for a wide variety of needs and to encourage participation by "all relevant categories of school staff and community members"(p.77) in these activities such that

i. "... every teacher has the opportunity to participate in at least five days of in-service education outside of school hours each year" (R4.2) apart from their involvement with in-service activities when schools are in session;

ii. "every teacher should be eligible for full-time paid release for one school term, or its equivalent, after

every seven years of service in order to follow an approved programme of professional development" (R4.3);

iii. "tertiary institutions engaged in teacher education should be funded to provide non-award courses for the teaching profession...(and)...their recurrent grant for teacher education should be augmented by a sum equivalent to five per cent of their budget for award courses" (R4.4);

iv. "specialist post-experience courses for training selected non-aboriginal teachers to teach aboriginal children should be conducted at a number of institutions with appropriate staff expertise" (R4.5);

v. "...all pre-school teachers (should be) eligible for in-service support..." (R4.1);

vi. "relevant authorities should provide for the establishment of centres of specialisation which are oriented to special areas of in-service need" (R4.6);

vii. "there should be an expansion of travel, accommodation and release time provisions for specialist teachers to engage in in-service activities."

Whereas the NITE Committee believed that "if the employer's own activities - such as planned changes in school organisations, curriculum or assessment methods - have created a need for teachers to be retrained, the employer must provide appropriate retraining opportunities", it also stated that "the responsibility for continuing professional development rests ultimately with the teacher himself" (p.81). Further, "teachers have a professional obligation to participate in in-service education, an obligation which can be supported by various incentives" (p.82).

The Vickery Committee in W.A. underlined the responsibility of teachers to maintain their professional development by recommending

> "that employing authorities include as criteria for appointment and promotional positions evidence of significant and recent professional development by way of participation in organised in-service work, involvement in the work of professional associations, participation in school-based research or curriculum innovation, the production of educational resources, or progress toward further relevant academic qualifications" (R30).

However, Vickery's Committee seems less optimistic than the Auchmuty Committee about the relaxation of Government purse strings to pave the way for a rash of further professional development. More indirect methods of funding were recommended such "that opportunity for further studies on a full-time basis be increased by

(a) employing authorities adopting a more liberal approach to application for leave without pay; and

(b) teacher organisations and employing authorities investigating the establishment of a pattern which would enable individual staff to elect to receive a reduced rate of salary over a number of years in order to earn a period of paid study leave at the reduced salary rate" (R31).

In the non-award course area the Vickery Committee asked the Minister of Education in W.A. to recommend to the Tertiary Education Commission

> "that it relax progressively, over a suitable trial period, its present restrictions on the use by tertiary institutions of recurrent funds for non-award in-service courses for teachers by nominating amounts to be made available to institutions for this purpose" (R32a). However, in respect of informal teacher development activities the Vickery Committee considered "that substantial responsibility for teacher development rests with individual teachers and with school staffs" (p.74).

The W.A. Committee of Inquiry noted that there was "considerable divergence of opinion concerning who should bear responsibility for teacher development activities - the employers or the teachers themselves" (p.75). However, "the Committee considers that teachers should themselves be responsible - and in their own time for the upgrading of their academic qualifications... and maintaining their own professional competence. ....On the other hand, in-service work arising from the needs of the system is the responsibility of the employing authority" (p.76).

Regardless of who pays, the Vickery Committee was concerned about the ad hoc nature of provisions for in-service training and that the needs of teachers were not being met at the present time. As a consequence it recommended

> "That employing authorities assess the needs for continuing teacher development and establish a long-term policy to meet these needs. The policy should establish priorities for organising in-service activities supported by employing authorities and procedures to ensure that all teachers who need to participate have the opportunity to do so. In addition, the policy should enable employing authorities to co-ordinate the in-service activities provided through the tertiary institutions and through the Service and Development Committee." (R34).

It is in this context of concern about the sufficiency of in-service teacher education provisions that WAPSEC initiated the present project to ascertain teacher needs as a possible guide to more systematic professional development.

5.0 DEFINITIONS

The definition of in-service activity has created considerable debate over the last couple of decades, and the terms used reflect changing attitudes. Thus, according to the Committee of the Victorian Enquiry into Education (1980, p.288), the term 'In-service training' was used by the Chief Inspector of Primary schools in a 1949-50 report. The nature of the activity was exemplified by the U.S. Department of Health which described it in 1965 as "a program of systematised activities promoted or directed by the school system, or approved by the school system, that contributes to the professional growth and competence of staff members during the time of their service to the school system" (Henderson, 1978, p.11).

By the time of the James report in 1972, the use of the term 'training' was under question. "For this large and complex field it is clear that in-service training however convenient as a shorthand is a very misleading term" (1972 p.5). Also "true in-service education is more than in-service training or on the job training, terms borrowed from industry.... it must involve more than practices and procedures. It must also be concerned with attitudes of mind ..." (Wisor and Wills, 1972. p.69).

The critical reappraisal of the use of the term 'training' was associated with the general movement in the early 1970's towards professionalism in teaching. Batten (1977, p.12) asked: "Is our prime concern with in-service training in which an employee is told what to do and how to do it? Or is it with in-service education in which a teacher professional is supported in his professional task of trying to answer the question for himself?" The new emphasis on professionalism saw a progression of changes in the definition of in-service education. Thus Cane was quoted by Scriven (1978, p.1) as saying it could be taken to include "all those courses and activities in which a serving teacher may participate for the purpose of extending his professional knowledge, interest or skill." For Carter Good (1973) "In-service education means the efforts of administrators and supervisors to promote professional growth and involvement of educational personnel" in which initiative is directed from the top down, whereas Karmel (1973, p.119) defined it as "all the planned experiences which a qualified teacher may undergo for the purpose of extending his professional competence." More recently in Australia, Batten wrote: "There needs to be a concern with affective as well as cognitive objectives, professional growth as well as practical training, with initiatives being taken as much by the teacher himself as by the administrative authority" (1977, p.12).

As the definitions changed so too did the names of the departments or committees responsible for managing in-service activities to incorporate the concept of professional development and education as distinct from training.

The meaning of 'professional' is indicated by Power (1981, p.164) who stated that "the term 'professional' carries with it the assumption that if a school is to improve the quality of the service it provides, its staff must be more than efficient technicians. To improve the effectiveness of teachers, ways need to be found to facilitate the growth of the 3 c's of professionalism : competence, conceptualization and commitment." The term 'development' indicates long term growth and change. Batten (1977, p.12) thus described in-service education as "a natural process of professional growth in which a teacher gradually acquires confidence, gains in perspective, increases in knowledge, discovers new methods and takes new roles."

Ingvarson (1976, p.1) documented another and more recent change of emphasis. He noted the "important differences in emphasis in the respective chapters on teacher development in the 1973 Karmel report and the June 1975 report of the Schools Commission. Where the first mentions teacher needs and teacher initiative, the second is more likely to refer to school problems and staff decision making." The definition of in-service as the "planned experiences which a qualified teacher may undergo" was extended to include the planned experiences which a school staff may undergo to improve its competence.

According to Liebermann (1978, p.69):

> "We use the term staff development instead of in-service because it suggests a different approach to improvement, one that considers the effects of the whole school (the staff) or the individual (the teacher) and the necessity for long term growth probabilities (development). We reject the idea of giving courses and workshops to individual teachers in isolation from their peers and their school. We accept and explore further the fact that development means working with, at best, a portion of a staff over a long period in time with the necessary supportive conditions."

The emphasis switched also from the individual to the communal level even to the extent that the Schools Commission envisaged an in-service education for all involved in the school community and sought to encourage the access of parents to in-service education programmes.

An examination of the changes in emphases in terminology is not a theoretical exercise since by implication these changes have gone with, and will continue to go hand-in-hand with changes in the models associated with in-service education. In addition, Nicholson (1976) noted that divergencies in definitions gave an indication of the substantive factual problems in the field which received attention at any point in time. Indeed, along with the changing emphases and the widening of the scope of the definition, the classes of activities perceived as pertaining to

in-service education have also changed and widened. Karmel (1973, p.119) included only 'planned activities' but Ingvarsen (1976, p.15), went so far as to define developmental research as covering "almost any activity which helps a teacher benefit from his own experience, investigate problems he has identified himself, or simply, to learn more about what he is doing and the effects this is having."

The practical problem in accepting any particular definition is whether it will circumscribe the nature of the in-service activities in a way which some may find unacceptable, or whether it is so broad as to lack direction. For example, Nicholson (1976, p.81) quoted Cogan's definition of in-service education as including "the collegiate and school-based programmes of professional study and work in which the teacher is involved after he has been certified and employed." This restricts the activities to programmes of professional study and work which is helpful for a working definition, but it also restricts the 'where' so as to eliminate professional conventions, independent teaching centres and independent personal research. At the other extreme, Nicholson himself returned to the James report (1972, p.10) in which in-service education "comprehends the whole range of activities by which teachers can extend their personal education, develop their professional competence and improve their understanding of education principles and techniques." A decision on the restrictiveness or comprehensiveness of the definition will depend on the uses to which it is being put and the viewpoint of those who are using it but a definition which is too all encompasssing will be useless as a working definition.

6.0 OBJECTIVES OF IN-SERVICE EDUCATION

In-service education becomes a necessity for the following reasons, according to Hanson (1980, p.86):

- "Change is a fundamental element of our world today and the schools must be a part of this change.
- New knowledge and new skills are being required of our citizens.
- There is a professional responsibility and need that the most valid and relevant skills and subject areas be included in school programmes.
- Renewal is characteristic of a dynamic and improving profession.
- In-service education is a means of assisting the professional educator to be the best he/she might become."

In Australia Karmel (1973, p.119) stated that "the provision of continuing opportunities for the growth and development of the teacher's competence is particularly important when social and educational change is continually making current practices obsolete or relatively ineffective."

Social change and educational change affect one another. Auchmuty (1980, p.80) for example, listed six areas of emergent needs which must be met to improve the effectiveness of schooling. These were:

- school community relationships;
- the needs of children from a range of social and cultural backgrounds including those from minority ethnic and aboriginal communities;
- detection, diagnosis and remediation of learning difficulties and handicaps;
- gaining insight and experience in the nature and functioning of contemporary society;
- transition from school to work;
- substantive curriculum areas.

If education cannot respond to changes in society or in social attitudes such as those listed it becomes obsolete. Whether it can respond depends on the circumstances which exist within society itself. However, Evans (1976, p.195) asserted, "if values and social constraints set the stage for planning.... the analysis of educational needs directs it." Thus it is necessary to look generally at the concept of need and how it relates to in-service education.

The Schools Commission Report (1977, p.18) delineated four levels of need in in-service education:

- the needs of individual teachers;
- the needs of functional working groups of teachers and other people associated with schools;
- the needs of the school as a whole;
- the needs of school systems.

It stated that "in order to provide a balanced in-service education programme, development committees must assess the relative importance of each of these four kinds of in-service needs."

The levels of needs have been grouped elsewhere in the literature as individual needs, system needs and general educational needs, or as in the O.E.C.D. reports, simply individual and system needs (O.E.C.D. 1978, p.2). However, the actual categories are not as important as the recognition that there does exist a hierarchy of groups with differing needs and that the needs of all are relevant, i.e. the needs of those at the base, the classroom teachers, as much as those of the upper strata.

Evans (1976, p.196) highlighted the problem of who defines the needs in "an educational system or sub-system; a group of teachers used as an index of the whole teaching profession; or each individual teacher?" He asked: "to what extent should in-service needs be defined by those who will be the providers of teacher education resources - the tertiary institutions, advisory teachers, inspectors, in-service committees?... There is a proper distinction between what teachers regard as important in-service functions and what teachers should regard as important functions in terms of general educational values. It is difficult, however, to see how any in-service programme could be effective unless it did cater for what teachers or participants felt to be their interests." Evans concluded that account must be taken of the needs of all levels, "that a dialogue should be fostered between teacher and teacher, teacher and parent, teacher and academic, teacher and principal, between all concerned with the education of children... The means of fostering this dialogue... may be the most pressing need of in-service education" (1976, p.198). Similarly, the Schools Commission Report (April, 1978, p.89) reaffirmed that the needs of all those concerned with education should provide the basis for all developmental activities. It is relevant then to look at the needs of all levels.

6.1 GENERAL EDUCATIONAL NEEDS

Ignoring the individual teachers' needs for the moment and concentrating on the broader spectrum of educational needs, a most dramatic change has occurred in education with the drop in student numbers and the decline in teacher turnover. This circumstance alone is putting a greater onus on in-service education than has existed previously. Auchmuty (1980, p.68) stated that "over the next twenty-five years the continuous professional development of practising teachers will become the major means of safeguarding and further improving the effectiveness of the teaching forces and thus the quality of learning in Australia's 10,000 schools and pre-schools." The Committee believed that new graduates will no longer be a "significant influence for renewal, adaptation and change in schools" since by 1985 they will only constitute six percent of the teaching force. Vickery (1980, pp.68-69) referred to the needs emerging because of the slowing down of teacher turnover

as "the need for revitalization and extension of subject area knowledge or to improve overall teaching competence." In commenting on the Auchmuty report, Ohlson (1980, p.16), stated that "in the new circumstance, the quality of education will depend on the capacity of teachers who have already been trained, to respond to rapid social and educational change."

6.2 SCHOOL NEEDS

At the next level of focus where the school and the school community are regarded as a whole, as with education generally, some needs arise because of change. Educational, social and cultural changes already referred to above may affect the functioning of the school specifically as well as education generally. Needs specific to a school arise sometimes because of the circumstances of the population it serves, for instance if it serves a largely migrant population. Other needs may arise when the school as a group responds to encouragement to modify its own curriculum or to introduce an innovation, (Schools Commission, 1979, p.33), or, as schools gain greater autonomy in their own operation through devolution of decision making to school level.

Some countries, e.g. Australia and the United States, are beginning to emphasise the involvement of the community with the school (O.E.C.D. 1978, p.23). The New South Wales State Development Committee responsible for administering development funds, for example, published a statement of aims and objectives for 1981 which included the need to support school communities in developing curriculum and the need to assist schools to develop as organisations (Carey and Langshore, 1981, p.194). Other countries are not yet emphasing community involvement. The implications of this difference for in-service education are not clear because of the paucity of information, but it can be said that if there is likely to be greater involvement of schools in the community and greater awareness of the rights and roles of parents this will have repercussions for in-service education (Cameron, 1981, p.19).

The general trend within in-service education appears to be to analyse needs in terms of the system or school, hence there is a move towards school-based, school focused models and whole school development. Schools Commission development committees have given increasing emphasis to the promotion of activities of this kind since 1975 (Schools Commission, 1979, p.33). This will be discussed more fully in section 7.0 of this report, dealing with models. However it should be noted here that many staff development programmes fail because of their over commitment to organisational goals (Schiffer, 1978, p.21). Although organisation goals must guide a staff development plan, it is important to analyse how these goals are determined and how they interface with individual teachers' needs.

6.3 TEACHERS' NEEDS

In-service education is regarded by teachers to be irrelevant unless it addresses itself to what they perceive to be their own needs.

Empirical data such as that from the Hunter region study (Campbell, 1979), demonstrates that the relevance of courses to teachers' needs is the major factor determining attendance or non attendance at in-service courses. In the Hunter Region seventy percent of teachers attending courses gave 'personal interest' as their major reason for attending.

The Schools Commission Report (1979, p.33) described two aspects of individual teachers' needs. "Problems occurring in the classroom or school can generate needs of a concrete or immediate kind. Secondly, teachers sometimes will need to advance their career prospects by undertaking courses or activities which will equip them for new roles". Examples of the first are the need for management training or keeping up to date in a subject field or teaching area. Studies have been carried out into the needs of teachers in specific fields, e.g. teachers of secondary school mathematics (Hendrickson and Vivant, 1978), and chemistry teachers in secondary schools (Brown, 1972). In Australia Betjeman, Dymond & Schock (1979,p.10) detailed materials available to science teachers to assess their own needs. In both cases teachers can be grouped with others who face common problems and therefore have similar in-service needs. Although the needs can be designated as individual, they can be dealt with as group needs, to be satisfied in group situations.

The Vickery report highlighted the following groups as requiring specifically tailored in-service (1980, p.72):

- Teachers retraining in order to teach new subjects or adapt to major revisions of existing curricula.
- Teachers re-entering the profession after prolonged absences.
- Teachers moving into promotional positions for the first time, particularly positions with substantial administrative and management responsibilities.
- Teachers assigned to lead or co-ordinate school wide developments or special programmes in their schools.
- Teachers responsible for the induction and ongoing professional development of other teachers in their schools.

- Teachers seconded to advisory teacher and other system level support roles.

- Teachers moving to geographically remote areas particularly to district high schools and small primary schools.

- Teachers moving to schools with high proportions of aboriginal children and children from other ethnic groups.

- Teachers working in schools drawing substantially from economically and socially disadvantaged areas.

- Teachers working with exceptional children or children with specific learning difficulties.

In-service programmes dealing with specific groups were found to be much more successful than global type programmes, (perhaps because the global programmes devalue the experience of the individual participant, thus denying an important assumption which underlies adult learning (France 1981, p.155) - the primacy of the individual in implementing change, whether initiated from inside or outside the school.

There is another typology which can be used to group teachers for their in-service needs. This is the career profile typology originating in the United Kingdom which however met with some opposition (O.E.C.D., 1978, p.21). France (1981, p.158) doubted the possibility of a single profile dependent on career indices, an age performance cohort, and referred to the work of Corwin who looked also at vocational commitment of individual teachers. Earlier Katz had suggested developmental stages in the work life of a teacher (Warner & Lipke, 1981, p.182). His four stages were - survival, consolidation, renewal and maturity. Wright (1980, p.32) went one step further in relating the career profile to vocational commitment and thence to attitude to in-service education. He suggested the following stages in a career profile:

1. Survival - the newly appointed teacher still uncertain, not concerned with standards only survival. Receptive to in-service activities which satisfy survival needs.

2. Control - when routines are developed and basic rules established. At this stage needs may include:

   a. techniques in teaching multi group situations in various subjects;

   b. guidance to assess the quality of work obtained from students;

c. techniques in supervision to ensure the development of high quality student work and the means of achieving student 'pride' in work;

d. curriculum content and planning guidance;

e. evaluation and testing procedures, effective records;

f. methodology - methods by which optimum learning situations can be fostered. Techniques in handling small groups.

3. Security - when routines are established, the ability of children recognised, but special programmes to meet individual needs not evident. Testing focused on incidence of error, records indicate content, coverage and progress made. Teachers at this stage see little need for change in their competencies. Ineffective use is made of activity based planning, activities lack aims and thorough planning.

4. Analytical - demonstration of significant change in teachers' ability to analyse children's needs, remediation to the point of need. Student being trained to learn. Teacher analytical, self critical, receptive to in-service and innovation, not threatened by new ideas.

5. Dynamic - exemplified in the high quality of teaching skills. Critical awareness of students' needs, outstanding class management. Remedial and preventive measures used. Emphasis on student learning to learn. Advisory assistance readily sought, teacher involved in in-service and teacher workshops as group leader.

Wright also suggested three failure stages which could be added to the above categories, viz.

1a. Non-survival.

2a. Complacent rote teaching. Attitude to in-service of passive non acceptance. Good order but student performances apathetic and teacher critical of change.

2b. Declining competency, rote teaching, preparation, planning, etc. based on past experience. No remediation. The 'burnt out' teacher of U.S. literature.

Wright inferred that the greatest percentage of the teaching population is in stage 3, the secure stage, where receptivity to

development happens to be least, receptivity being greatest in stages 1 and 5. Teachers in stage 3 see no need for further development; progress beyond this stage is even feared as it implies changes in emphasis and methods, a temporary loss of mastery, and involves considerable personal thought and energy. However, it is these teachers who should become the focus of in-service activity. Because induction is already receiving attention and because of the present circumstances of decreasing turnover, change and improvement in education can only come from development of this group.

According to France (1981,p.157) "it is time for a clearer focus on mid career personnel, not only because there is such a significant proportionate increase in this segment of the teaching service, but also because an accretion of years of experience does not necessarily bring professional growth. There can be little doubt that the extent to which developmental satisfactions of experienced teachers are met in future will greatly influence the quality of classroom learning for very many students". The Interim Report of the Committee of the Victorian Enquiry into Teacher Education (1980), was also quoted by France (1981, p.157). A submission to the Committee emphasised "the necessity to direct closer attention to the professional development of the experienced classroom teacher who has at least fifteen years experience and is devoted to class teaching rather than to administration or other activities outside the classroom. This aspect will become increasingly important as the teaching force ages, and new entrants to the profession decline in number."

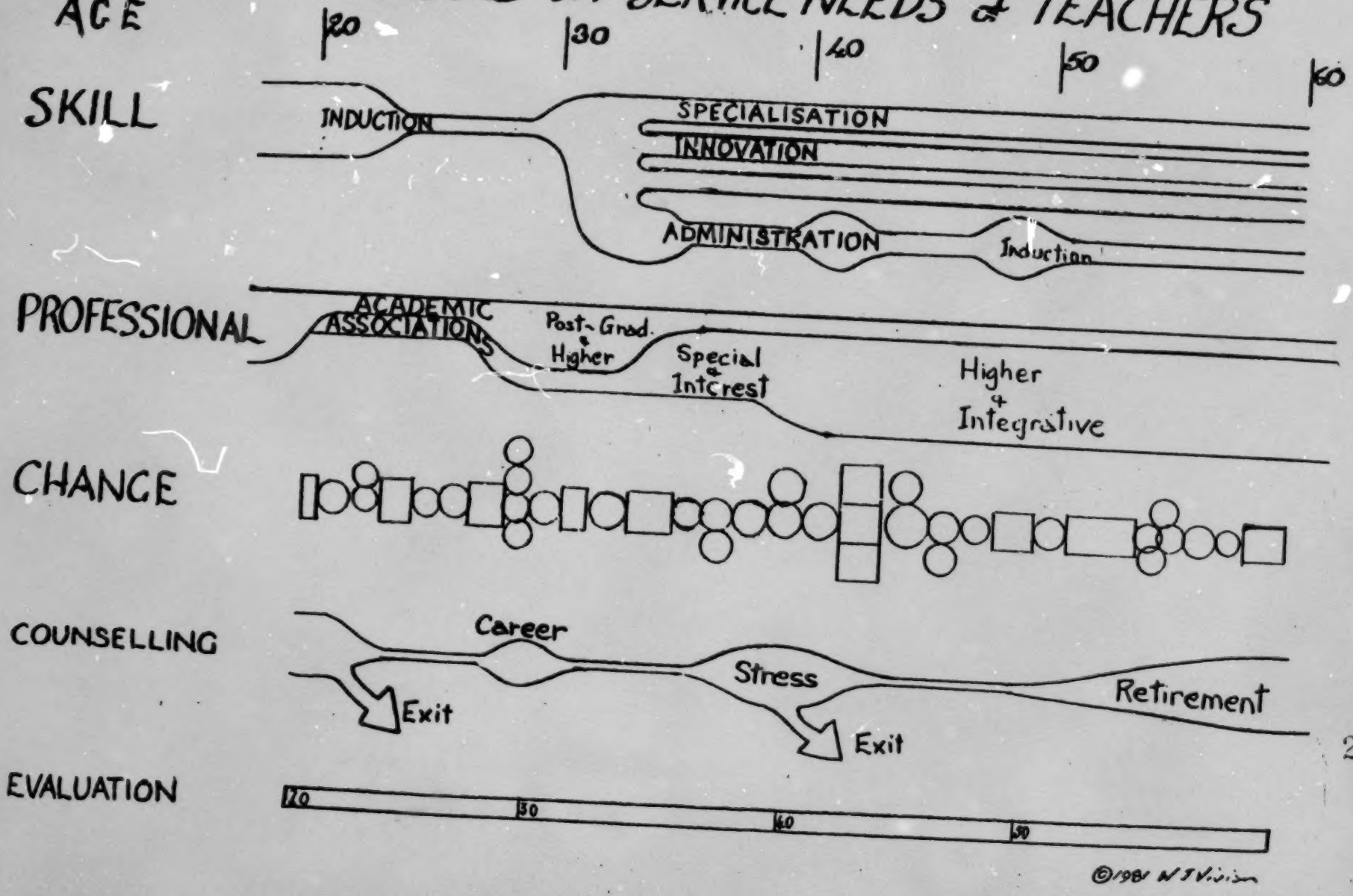
The Rand study (McLaughlin & Marsh, 1978, p.92) suggested that teachers with many years of experience find it more difficult to maintain the use of new teaching strategies and new teaching materials over time. Energies are often shifted to other interests, e.g. family.

It would be appropriate then to look at the needs of the classroom teacher who has reached the stage of development catagorised by Wright as stage 3. Vivian (1981) conceptualised the needs of teachers at different ages in terms of five strands or areas of need (Figure 1). The strands relate to the aims of the in-service and include three major areas: improving skills; providing for professional development; and encouraging change. There are two minor strands interrelated with the others: counselling and evaluation.

Skills in the first strand of Vivian's model include knowledge and ability to carry out tasks. In-service needs are great during induction, they lessen as the teacher becomes more experienced and only requires to refine skills he/she already possesses, but needs increase again at a later stage with new skills required for specialisation, innovation or administration. The second strand for professional development includes the thrust for post-graduate and higher qualifications

FIGURE 1

GENERALISED IN-SERVICE NEEDS of TEACHERS



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by the experienced teacher and the need for support from professional associations. These are significant for their influence in socialisation of teachers into appropriate roles. The third strand, in-service for change, is less related to stages in the teacher's career than to spasmodic pressure for curriculum development (or curriculum adaptation which is less dramatic). The need for counselling may vary as other needs vary and can include career counselling, stress counselling and counselling for retirement, and exit counselling for those planning to leave the profession. These may not contribute to professional development but are relevant to personal development which can be regarded as an aim of in-service education. Finally, there is the strand of evaluation which should interrelate with all other strands since evaluation is needed to ascertain the other needs.

Vivian's approach is useful in highlighting needs at different ages and it demonstrates that there is a likelihood that teachers will have increased need in most areas of in-service education in the middle stages of their careers. Very little research has been undertaken to make such generalisations specific. McLaughlin & Marsh (1978, p.92) in recommending that attention should be given to the needs of the mid career teachers, stated that "a more personal approach to professional growth may be important for experienced teachers. This personal approach should emphasise new cognitive frameworks for looking at teaching practice and at their effectiveness as teachers." Other writers emphasised that in-service education for experienced teachers must acknowledge their experience and must use adult learning techniques (androgogy). However, very little research has been undertaken in this field so that it may be necessary to look at data on individual teacher needs in general and make inferences to relate these to the needs of teachers in the mid career category.

Research by Evans (1978) identified six major areas of teacher need in the U.S.

1. Developing pupil interpersonal skills;
2. Implementing instruction;
3. Planning instruction;
4. Classroom management;
5. Individualizing instruction;
6. Diagnosing student needs.

Cane (1969) in England found that the main topics preferred in in-service education were teaching methods, aids and materials, and development of new teaching schemes. Primary teachers gave more support to topics concerning 'learning problems' and secondary teachers to 'subject knowledge'.

Data from Australia on needs ascertained from questionnaires, surveys etc. will be discussed in Section 8.0 of this report.

However, it is useful here to refer briefly to the main findings. The Victorian In-service Evaluation Project (1975, p.27) for instance, involving almost 1,000 teachers in Victoria, indicated teachers feel that it is important for in-service courses to be subject oriented, directly related to teaching content and method. The three reasons for attending in-service courses which were considered most important by teachers were to exchange ideas with other teachers and to learn more about a subject area and methods of teaching.

The Briody (1974) Report from Queensland demonstrated that teachers most preferred the following types of in-service courses:

. Methodology in specific subject areas;

. General instructional strategies;

. Content level of subject areas;

. Instructional materials;

Least preferred courses dealt with:-

. Modern educational psychology;

. School administration;

. Modern educational philosophy.

More recent Queensland research by Scriven (1978, p.3) supported the above findings.

Another study also from Queensland (Logan, 1979, p.17), suggested the need for in-service education programmes which focused on the school as a functional unit which developed self monitoring approaches of the teacher's own professional behaviour, particularly in classroom teaching; and which were characterised by a high degree of local autonomy. Three major areas were given the greatest priority: the lack of communication within schools and of staff involvement in decision making; the inability of classroom teachers to diagnose and to carry out remedial teaching; and the insufficiency of people at all levels of the Primary Division to undertake guided self analysis of their own professional performance.

The New South Wales evaluation reports from the St. George, South Coast and Hunter regions (Clark, 1980) found that the ways in which teachers felt they had benefited from in-service education were in obtaining

- new ideas for classroom management teaching styles
- better understanding of the syllabus
- greater competence in the use of hardware and other materials
- increased confidence.

The above findings give some indication of likely areas of need for in-service education as perceived by individual teachers. However, the most urgent pre-requisite for further development of in-service education must be a more thorough assessment involving reappraisal of the communication process involved. It may be that in Australia too much emphasis has been placed on the use of the survey or the questionnaire as the instrument of assessment. Other more innovatory strategies may provide more comprehensive or more probing appraisals. It would appear for instance that any need determination should take into account what research has to say about teaching (Tobin, 1981, p.9 and Lunetta, 1981, p.5). In Australia, as until recently was the case overseas, research in the classroom has been divorced from teacher education. Beneficial outcomes arising from research have not been implemented into classroom practice.

Some Australian wide research projects from which implications could be taken for in-service education were the identification of tasks and competencies associated with the basic skills of literacy and numeracy (Keeves & Bourke, 1976) and the Access Skills Project (Nash, 1976) concerning acquisition of literacy, numeracy and social interaction skills. Most classroom research has concerned itself typically with the quality of teaching and has used student outcomes as its measure, but this type of approach is now regarded as inappropriate and more useful approaches can be employed (Rennie, 1981, Tobin, 1981). In Section 8.0 on Evaluation this topic will be discussed further. However, it is acknowledged that the key persons in classroom research should be the classroom teachers themselves, firstly, because they are the professionals in the field and secondly, because they should be the judges of their own teaching competency. If teachers are not involved in this way, there is the danger that needs are regarded merely as deficiencies in teaching.

This problem relates to how the needs are ascertained. According to Ingvarson (1977, p.147) the concept of need may be out of place and paternalistic. He distinguishes between a solution centred approach and a problem centred approach where the solution centred is equated with a needs approach. He quotes from Eraut to define these approaches:

"In the solution centred approach there is assumed to be a solution which fits a large number of teachers' problems and the

purpose of in-service training is to transmit it. Whereas in the problem centred approach, the emphasis of in-service education is on diagnosing and studying problems, and the solution has to be found by ...(the teacher)...himself." The first is directed mainly at the individual teacher removed from the school who has defects identified by someone else who knows a remedy. The second focuses on groups of teachers, schools and sometimes local groupings of schools who engage in the definition, study and solution of institutional problems. In general, the needs approach, or deficiency approach, "is characterized by the view of other educators that teachers need staff development because they lack the necessary skills to teach successfully" (McLaughlin, 1978, p.69). It implies that other educators know and can justify their own statements about what constitutes good teaching, while what actually constitutes good teaching has probably never yet been resolved.

Ingvarson whose work was for the Victorian In-service Education Committee, questioned how VISEC could be responsive to the needs of the schools unless it had greater autonomy to support the second type of approach (1976, p.148). The same problem is apparent in Western Australia, in state funded teacher development. A needs approach is relevant to education as a whole and in improving systems or schools as entities. It is relevant to teachers as individuals in so far as they are in a position to determine their own needs and that their needs are not regarded as deficiencies in their teaching, but may include personal and vocational motivations involved in professional development, i.e. needs come to mean openness to development. The task of in-service education may become one of fostering motivation in teachers to seek to develop professionally.

With this proviso, an analysis of in-service education models and possibilities becomes an examination of process as much as of product. Factors which must be considered include not only an awareness of the needs of various levels and whether the in-service activity is satisfying the needs it is designed to satisfy, but also the factors of who determines the needs and how they are determined. It may also involve who controls the means by which they are to be satisfied.

Finally, in this type of needs approach it should be understood that giving primacy to the needs of the individual teacher does not imply that needs of the system or overall educational needs are relegated to second place. The type of needs hierarchy suggested does not resemble a psychological one in which more basic needs must be satisfied before needs of higher levels can be dealt with. The hierarchy of levels suggested here is more an extension from the individual to the global and it should be understood that the individual perceives his needs within the educational context within which he works. His needs are not separate from educational or system needs. His perception is shaped by the educational ideology within which he has been

trained and he bases his judgement of his own competency on ideals promulgated by it. Unless there is a major well of discontent and move for change at grassroots levels, the satisfaction of the needs of the individual should imply also satisfaction of more global needs.

7.0 MODELS

Logan (1978, p.2) made the following generalisations about the in-service models perceived by teachers to be most effective:

- teachers desire to be involved in and responsible for the planning and conduct of their own in-service education.
- teachers prefer to be tutored by fellow teachers on matters directly relating to the classroom situation.
- teachers need to have ready access to people whom they value as counsellors and advisors whether these people be fellow teachers, principals, advisors, inspectors or academics.
- functional programmes should use a problem centred approach which emphasises each teacher diagnosing and studying problems specific to his/her own situation.
- in-service education needs to be individualized (i.e. individual differences should be catered for).

It could be added that models which involve the teacher's work groups are also more likely to be perceived as being effective. This will be discussed later. There are various typologies in existence which categorise the models available for in-service education. The O.E.C.D. (1978, p.15) designed a useful table of INSET strategies, which has the same sort of categorisation as used by Nicholson (1976, p.6) in his overview of the contexts for in-service education. The typology summarised in Table 1, is an adaptation from both the O.E.C.D. and Nicholson. It is elaborated below.

7.1 INTERNAL MODELS

Internal or functional in-service education activities are directly related to teachers' current school involvement and are responsive to immediate needs. Bassett (1978, p.63) described them as typically short in duration but this may not now be the case. Innovations such as staff development and intervention (as in organisation development) are typically long term processes.

TABLE 1 TYPOLOGY OF IN-SERVICE EDUCATION MODELS

RELATION TO SCHOOL	SOURCE OR AGENT	MODEL	LOCATION AND TARGET USERS					
			ON-SITE			OFF-SITE		
			INDIVIDUAL	GROUP	WHOLE STAFF	INDIVIDUAL	GROUP	WHOLE STAFF
INTERNAL (FUNCTIONAL)	JOB-EMBEDDED	Staff Meetings Committee Work	*	*	*			
		Team Teaching	*	*				
		Consultancy Advisory Personnel	*					
		Professional Reading	*			*		
	JOB-RELATED	Workshops				*	*	
		Teacher Exchange Visits				*	*	
		Consultancy eg. C.D.	*	*	*	*	*	*
		Staff Development	*	*	*	*	*	*
		Teacher or Education Centres				*	*	
EXTERNAL	PROFESSIONAL ORGANISATION RELATED	Professional Organisation				*	*	
	FORMAL INSTITUTION	Formal Award				*		
	SELF DIRECTED	Non-award Release Courses				*	*	
		Study Leave				*		
		Reading				*		

There are two broad categories of activities covered by internal models, job-embedded and job-related.

Job-embedded activities

Job-embedded activities are a by-product of regular teaching activity, i.e. in unity with the teaching task. They are economical in that two purposes are served by the one activity. The literature indicates that they are preferred by teachers since they are undertaken in school time. Job- embedded activities include four different facets:

1. Staff meetings, committee work.
   e.g. programme planning and organisation.

2. Team teaching.
   This involves interaction with other staff and an opportunity to learn from them.

3. Consultancy.
   Interaction with consultants is less directly embedded in the act of teaching. It can take many forms, being either voluntary or mandatory, pre-established or variable, etc. The type of consultancy approach which is job-embedded is usually of an advisory nature.

Research indicates that teachers prefer an advisory approach where the approach is determined by the teacher, is in terms of the teacher's needs and is held at the school during school hours (McHaffie 1980, p.36).

In Western Australia the advisory teacher service has expanded over the last decade to a complement of the equivalent of 140 full time advisory teachers in 1980. The advisory teachers' work is specifically related to curriculum development but their total function includes:

- program development and implementation;
- professional development of teachers;
- support to beginning teachers and teachers who are not adequately coping with their work;
- systematic monitoring of programme effectiveness (McHaffie 1980, p.6).

In a survey of the local scene, McHaffie found that problems arose because of the combination of the curriculum development function with the professional development one. There appeared to be conflict between these two roles perhaps because initiation for visits in the first case came from outside the

school and in the second from the teachers themselves. Although visits occurring in response to their own perceived needs were regarded by teachers as more helpful than the others, teachers generally found visits useful and there was as great a demand for advisory personnel to make regular visits as for them to respond only to teachers' requests. McHaffie (1980, p.54) suggested that the conflict between the two roles and the differing appreciation of the visits could be resolved by the appointment of different people to fulfill the roles since different skills appeared to be required. In the curriculum development roles, the advisory teacher is expected to work in areas of long range curriculum planning, orientation of teaching staff towards new approaches, interpretation of new curriculum policies and other matters that involve changes in perspective and behaviour in classroom teachers... Advisory staff in this instance must be closely attuned to the special demands of consultancy and group process skills. In the professional development role this is not so necessary as the role is reactive and especially when relating to beginning teachers, more involved with immediate concerns of methodology and teaching practice.

The same sort of issues arise with advisory teachers throughout Australia although there are differences between the states in aspects of the services. New South Wales, for instance, has a service which emphasises process consultancy, i.e. helping people in the process of decision making rather than provision of subject base advice (in keeping with the thrust for total school development). In the A.C.T. also there has been a move away from subject based consultancy with the appointment of generalists. The A.C.T. differs from the other states in appointing more advisory teachers from the ranks of deputy principal and principal, which, while giving the advisory system greater status, may also affect the frankness of the consultation.

The O.E.C.D. report (1978, p.29) mentioned that some of the most significant innovations in in-service education relate to new types of consultancy of advisory personnel. A main concern appears to be the training of the advisors for this role. Some innovations reported were school based teacher tutors in the U.K. (Light, 1976). Ingvarson (1976) gave a detailed account of a school based teacher tutor in the form of a training deputy head at Ashmead School, Reading. Amongst other tasks in the job specification were that the training deputy head should arrange in-service courses for existing Ashmead staff, introduce regular job approval sessions and train senior staff in their use, liaise with curriculum development centres, etc. An in-service training committee was appointed to work under the training deputy head to propose, design and arrange on-going support for members of staff. Light (1976, p.153) claimed that the professional tutor in the United Kingdom was not always successful because of the difficulty of encompassing the task in one role. However, the concept of the professional tutor was, he felt, a necessary one.

The concept of the teacher tutor was a development from the Scottish 'regent' who was placed in a school to co-ordinate the training of college students undertaking their probationary period in the school. The regent role in some instances was broadened to take responsibility for the staff development of experienced teachers and the appointment to the position was made from within the school. Peck and Archer (1977, p.36) suggested that a future development may be a synthesis of the college appointed regent and the school appointed professional tutor since the regent has the expertise from the college which however does not account adequately for the all-round development of the skills of the student teacher, while the professional tutor emphasises the concerns of the particular school and perhaps neglects broader issues.

Similar innovations to the U.K. and Scottish school based tutors are the appointment of research and training co-ordinators to medium to large secondary schools in Japan; and the German/Swiss recommendation for university linked practical counsellors (O.E.C.D., 1978, p.29).

Micro counselling and clinical supervision are analogous approaches but most attention seems to be focusing at present on the organisation development approach which will be discussed under the 'job-related' heading below. The division here is slightly artificial but organisation development could be regarded as more of a long term process and less related to immediate concerns connected to the teacher's task.

4. Professional reading.

The fourth facet of job-embedded activities is professional reading in the job context. This appears to be under-used according to Nicholson (1976, p.9). In Western Australia the Vickery Report (1980, p.74) stated that much of the evidence that came before the Committee "tended to de emphasise" this area of in-service education. It found that there was no shortage of professional literature available to schools, e.g. from the Curriculum Branch and the Publications Branch of the Education Department. It recommended that reading should be encouraged by staff meetings or seminars based on literature relevant to areas of interest to the school.

Job-related activities

Job-related activities are related to but not strictly part of the teachers' work. Traditional models of job related in-service education include the following five types.

1. Workshops.

These consist of a group of teachers working together on problems related to their work. These have been one of the most

widely used forms of in-service education (apart from courses.) Assistance may be provided by resource personnel and the workshop may be held on the school site although it is usually held elsewhere. Problems arise with workshops because they usually require attendance out of school hours. They are also not perceived by teachers as being as helpful as they might be because they are usually initiated from outside the school and are not always responsive to teachers' needs. They do not normally incorporate follow-up activity for support or evaluation, which is also a failing. A recent development in Western Australia is the workshop session followed by a period of consolidation and experimentation in the school, followed again by a further workshop session. (An example is the Aboriginal Education in-service course funded by the Services and Development programme in 1982.)

2. Teacher exchanges and visits.

These are another traditional job-related in-service education activity. Western Australia was the originator and remains the administrator of an Australia wide and overseas exchange scheme, the School Exchange and Travel Scheme. This scheme is designed to provide for teachers and other people associated with schools the opportunity to make visits, usually interstate, for periods of up to a school term, in order to work with other schools and systems and to learn about developments in their areas of educational interest.

3. Organisation development consultancy.

A recent consultancy development of a functional job-embedded rather than job-related nature has been the increasing use of organisation development.

Ingvarson (1976, p.2) described organisation development programmes as "those which are concerned with establishing mechanisms for organisational problem solving." Mulford (1977, p.7) defined organisation development as "planned intervention by change agents/organisation development consultants, using behavioural science knowledge to help an organisation to diagnose its organisational purposes and process and develop a plan through which all members of the organisation can, themselves, modify these purposes and processes in such a way that they can sustain the modification process in a changing environment." It aims to develop a self renewing, self correcting school and it must involve the total organisation unit. Organisation development is a long term process rather than a technique and it usually involves a sequence of steps such as:

Data gathering;
Feedback;
Facilitator training;
Workshop;
Evaluation.

In order for organisation development to succeed, the staff must demonstrate readiness to be involved. Maintenance is necessary, not over-dependence or expectation that organisation development is a product rather than a process. Consultants, if used, must be low profile and plan to disinvolve themselves at a later stage. Finally, education principles need to be based on andragogy (adult learning).

In the first stage of an organisation development exercise, prior to commitment, factors which need to be determined include the scope of the intervention, the role of the consultant,(i.e. to what extent he/she should become a leader or an observer), the schedule, the expectations of all concerned, openness of information, confidentiality of individual's responses, and relationship between the external consultant and all other parties in the total school community.

The second stage, the data gathering or credibility and diagnostic stage, is when the staff identifies problem areas and outlines possible solutions. The coordinator provides educational inputs to increase awareness of behavioural science, knowledge and techniques, and involves those concerned in a choice of strategies. There should be broad participation in all aspects and task forces may be set up to provide feedback on work study, resources, parent involvement, student involvement, etc.

Once strategies are determined they need to be programmed to allocate responsibility and authority in such a way as to maintain commitment and to allow room for alteration of the programme including structural change. This is the facilitator training stage. There should be progressive evaluation and enquiry, anticipation of problems and generation of contingency plans.

Implementation occurs with the setting up of a workshop or workshops. The coordinator is decreasingly involved since resource people, facilitators, will soon be operating. However he/she remains in communication to give assistance when required. With implementation comes evaluation then consolidation. Evaluation should not be separate from implementation but a part of the process at every stage. This final stage is of long duration, the concern being more with the process than with an end product.

Mulford listed some of the difficulties likely to be encountered in the Australian situation. The fact that the educational system has an emphasis on evaluation or assessment rather than assistance militates against teachers being able to use an assistance exercise. A demand must be obtained and the development is more likely to be successful if such a demand is initiated from the top down. Workshops must be open ended and of four or five days' duration, which means teacher replacement

is needed unless they are held during vacations. There are difficulties in evaluating organisation development because of changes in expectations, differences at different stages in the process, etc. There is the possibility that in some cases organisation development will create more change than the system can cope with.

However, organization development is being used increasingly in Australian schools, for instance, in W.A. in the Catholic School System and in Queensland in the State Secondary system (Meggitt, 1978). One important organisation development project was the 1975 Whole School Withdrawal Experiment of the Queensland State Department of Education (Dore, 1976). The experiment was conducted in six primary schools, each school being perceived as a separate unit with courses specific to it, although all courses were planned to include a study of:

- group dynamics and sociology of the school;
- the child and what happens to him as he goes through the school;
- the school's total community;
- the real role of the school and how it can best fulfil this role;
- actual teaching techniques.

The course leader appointed was the local inspector of schools and other resource people were involved. Replacement teachers were given a two weeks' training course before the withdrawal which lasted one week and in most cases was conducted actually in the relevant school, using its facilities. Each school created its own programme during the week of withdrawal so that outcomes varied greatly, although the consensus was that the withdrawal was successful and that changes brought about because of it, contributed to the effectiveness of each school. Success in this respect was dependent to a large extent on the existing climate of the school, the more innovative and democratic gaining most. The actual withdrawal period was recommended in that it provided an uninterrupted period to discuss common problems, offered an opportunity to exchange ideas, allowed continuous and professional interaction at grade levels and, more importantly, across grade levels, provided a means for facilitating the induction of new members to the staff, strengthened the team spirit and opened wider lines of communication, gave an opportunity for all teachers to profit from the expertise of departmental officers and advisory teachers and clarified the meaning of terminology currently in use. Some criticisms of the experiment included that the programme was too structured and that the resource staff were not sufficiently prepared (Dore, 1976, p.3).

Since the original experiment, the Queensland Whole School Withdrawal Scheme has been used by a large number of primary schools. Several secondary schools have also been involved with lecturing staff from colleges and universities acting as replacements for the school staffs (Queensland Education Department, 1978).

Aspects of organisation development worth emphasising are that it is functional in relating to current school involvement. It involves teachers in the direct determination of their own needs in the school situation. The fact that the whole school, i.e. the workgroup, is involved, increases the probability that change will occur and that such change will be successful. Organisation development contributes to the professional development of teachers by its collaborative and systematic solving of school problems and is a problem solving rather than solution giving approach. The fact that it is school based offers the opportunity for on-going programmes and for follow-up and reinforcement of learning.

Reservations about the use of organisation development arise because of its commitment to management techniques, cost efficiency and definition of needs in terms of organisation rather than individuals. The criteria and practices of business which have been influences in its development may not always be suitable criteria and practices for education, although they have been an influence on education in the United States, for example, since the 1920's (Campbell, 1980, p.101).

4. Staff development models.

Staff development is a model of job-related in-service education with the goal of whole staff development but in this case without intervention from outside the school, although it may involve eliciting help from resource people. Ingvarson (1976, p.2) described staff development programmes as programmes in which teachers alone or in groups undertake investigation of their own teaching or curriculum problems and devise solutions. It is a long term process rather than an attempt to obtain a specific goal.

Schiffer (1978, p.7) listed types of staff development experiences for teachers as follows:

- values clarification (that is the opportunity to discuss educational philosophy with colleagues, and to rethink assumptions about child development, learning, and the role of the school in society);
- consciousness raising about the discrepancy between their 'ideal' values as expressed in words and their 'real' values as expressed in behaviour;
- group process experiences that focus on changing interpersonal norms;

- the opportunity to try out new teaching behaviours on a small scale and to discuss resultant problems with others;

- activities that enable staff to modify aspects of an innovation so that they are more consonant with existing attitudes and behaviour.

A well known research study, the Rand Change Agent Study (McLaughlin and Marsh 1978, p.70), analysed staff development in the United States and listed issues critical to the design and implementation of staff development programmes. These issues included - "What motivates teachers to acquire new skills? What helps teachers to retain these skills? What can the principal do to support and sustain teacher change? What is the role of the central administration in the efforts of classroom teachers to improve their practices?" According to McLaughlin, the Rand study identified four clusters of factors crucial to the successful implementation and continuation of staff development change efforts. These were:

i. institutional motivation;
ii. project implementation strategies;
iii. institutional leadership;
iv. teacher characteristics.

i. The motivation of teachers can be influenced by the commitment of those in authority, and strong commitment by higher education department personnel, e.g. district superintendents, is likely to favourably affect the outcome.

ii. Project implementation strategies can be categorised into four patterns - top down, grass roots planning, no planning, and cooperative planning with equal input from teachers and system personnel. The final category is essential for both short and long term success. The Rand study found also that staff training activities and training support activities account for a considerable portion of the variation in project success and continuation (McLaughlin, 1978, p.76). The quality of the activities is important, as is the specificity of the goals, conceptual clarity of the programmes and teacher participation in implementation.

iii. Institutional leadership is significant and includes the effectiveness of the project director as well as support and interest from administration outside the school and within it, from the principal. The school climate is also important, i.e. the general atmosphere of interest in change and willingness to change. This again may be influenced by the attitude of the principal. It may be that with the trend towards school-based, school-focused programmes, the principal may become the key figure as a change agent, as initiator, organisor, or supporter of in-service education programmes. Principals can contribute

to staff development by taking the lead in initiating corporate discussion and decision making about what should be done throughout the school in areas of need. They have the opportunity to encourage all members of staff to contribute to programmes. They can consider the most effective use of posts of responsibility so that their existance improves the school climate and helps to further good development in areas of curriculum. They can organise so that a bank of appropriate resources is available to members of staff. The Education Co-ordinating Committee (1980, p.25) suggested that one aspect of staff development which should receive more attention in the future was that of training head teachers to lead more staff development efforts in their schools. The Rand study (p.93) suggested that professional development for principals is critical, stating that "it is needed to strengthen the ability to carry out the many facets in the innovation process in the context of building an on-going problem solving capacity in the school." Ingvarson, (1981) also noted: "Similarly, pre-requisites for successful school improvement programmes are planned programmes of in-service education that will provide principals and other senior staff with the confidence, knowledge and drive to foster school based activities' (p.21).

iv. The final factor, teacher characteristics, includes attributes such as years of experience (which have a negative correlation with effectiveness), verbal ability, and sense of efficacy or attitude about own competency (both of which have a positive correlation.)

Assumptions about staff development made by the Rand study are that teachers are the best clinical expertise available; the process by which an innovation comes to be used in a local setting is adaptive and heuristic; professional learning is a long term, non-linear process; staff development should be viewed as part of the programme building process in schools and not undertaken in isolation from day to day responsibilities; it should be viewed as a continuing process, not an end product.

Examples of staff development projects overseas are the Ford Teaching Project of East Angolia described by Elliott and Adelman (1973), and the work of the Centre for Applied Research in Education in England. A programme in the United States which has been generally acknowledged as very successful is the one used by the Long Beach Centre in California described by Wood and Thompson (1980, p.377). The major components of this programme are teaching reading and/or mathematics objectives, diagnostic and prescriptive instructional skills, clinical supervision and follow up, maintenance and refinement. Skills are introduced singly to participants, modelled by workshop facilitators and practised with small groups while under observation, then analysed. During the workshop participants are released for classroom responsibilities. They work in small groups with other participants and have access to demonstration

classrooms, audio visual materials, etc., with the workshop usually being conducted in a local school.

In Australia in 1978 the Victorian In-service Education Committee decided to support a staff development project as a pilot venture. The main purpose of the in-service to be provided as part of the project was "to support classroom-based research studies by groups of teachers interested in exploring the effectiveness of teaching programmes or methods they are currently using or planning to implement" (Ingvarson 1979, p.19). Suggested guidelines for the applicants were that applications had to be made by groups of teachers, not individuals; duration of the project was to be at least one term; members could be drawn from one school or in groups from a number of schools; the submission had to clearly identify the classroom-based approach or problems to be studied; it would need to indicate that there was a support structure for the project within the school(s); it would also need to indicate that some form of external long term support has been obtained, and it should have shown that some consideration had been given to the financial support required. Eight submissions (out of fifty) were approved for funding and projects varied from trialling of Home Economics curriculum materials to assessment of progression in oracy skills, etc. The final evaluation of the project is not yet available but Ingvarson felt that the project represented one way in which the administration of in-service funds may be aligned with aspirations for professional autonomy (1979, p.20).

5. Teachers' or Education Centre

One of the principal innovations of in-service education to emerge recently has been the teachers' or education centre. A teachers' centre is "a place where teachers meet informally to discuss new ideas, projects, new practices, instructional materials, methods of teaching and any other problems they are interested in" (Dhand amd Murphy 1977, p.19).

The precedent for centres was the English teachers' centre which originated after the Schools Council Working Paper No. 10, 1967, and mushroomed after the James Report. These centres were usually funded and managed by local education authorities and had functions relating to local curriculum development and in-service education. The rapid expansion was halted by the cutback in funds of 1975 but numbers remained steady from 1977 onwards as replacement of teachers attending centres, the 3% release policy, was viable in a period of high teacher unemployment (Thornbury, 1977, p.15). The English teachers' centre has been described as "a relatively informal centre where teachers can meet and pursue their educational interests" (Nicholson, 1976, p.10), and it is also said to have played a prominent role in the initiation and fruition of a number of national (U.K.) curriculum projects (Dhand & Murphy 1977, p.20), being especially significant for its encouragement of teacher

based curriculum development. The centres' most effective contribution, however, has been through their in-service education programmes. In this it was hoped that they would provide a prime example of the problem centred approach in which teachers exchange views and opinions in order to work out their own solutions, (i.e. in contrast to the solution centred approach in which a solution is produced by those in authority and the in-service activity is designed to communicate this solution to the teachers thought to be in need of it.) This endeavour has not always been successful. Rudd (1973), for example, described the centres as having become just another place "where other people give teachers courses approved by the employing authority and normally controlled and designed by its representatives."

The teacher centre movement in the United States differs from the U.K. model in its diversity of types . Zigarmi (1978 p.173) listed eleven types of centres according to a typology devised by Yargan. These included seven organisational types such as :

- the independent;
- the 'almost' independent;
- the professional organisation;
- the single unit;
- the free-partnership;
- the free-consortium;
- the legislative/political-consortium,

and four functional types :

- the facilitating-type;
- the advocacy-type;
- the responsive-type;
- the functionally unique-type.

Other typologies have been based on ideological differences, e.g. the division into behavioural, humanistic and developmental types. The behavioural type is designed to improve specific teaching behaviours, the humanistic focuses on creating a learning environment where teachers can benefit from each other's expertise and the developmental encourages teachers to develop new understandings of their classrooms by reflecting on their teaching and studying children's learning.

Zigarmi (1978, p.176) grouped activities sponsored by teachers' centres into five categories:

- providing teachers with access to resources;
- helping teachers get together to work on common problems;
- helping teachers learn more about how children learn;
- helping teachers acquire skills in curriculum development and implementation;
- involving other groups - administrators, university faculty members, parents and community members in the programme of the centre.

One resource common to many centres in the United States is the self administering teacher training package, e.g. mini courses such as those produced by the Far West Laboratory for Educational Development. A directory of in-service teacher education packages is given in the Journal of Teacher Education, (Winter) 1974, 22 (4) pp.517-526. A variation on the teacher centre and the training package is a mobile computer-assisted instruction which is available to different schools, such as rural schools, too small and remote to support centres of their own. The programme reported lower costs and increased achievement in less time than for a comparable university based in-service course or institute (Nicholson, 1976, p.10 and Lehmann, 1971). Such packages may also be used individually by teachers.

Zigarmi (1978, p.185) makes the point that "in order to be responsive to and supportive of teachers' perceptions of their own needs and to allow responsibility to remain with the teacher, a teacher centre can have no agenda of its own". This makes it difficult to accomodate in university or college or district-based staff development programmes, but means that the centres are more likely to be effective in responding to needs and in recognizing that different kinds of help may be needed at different stages in a teacher's development, i.e. in providing teachers with individualized assistance. Zigarmi saw the future of in-service education centres as one of working in conjunction with other providers rather than attempting to take on everything that arises. The trend in the United Kingdom appears to be for the co-ordination between in-service agencies, local authorities and advisory services, teacher education institutions and universities. With the realisation of this endeavour, professional centres should be seen not just as teaching centres but as a network of support for schools (Light 1976, p.153).

In Australia there are various types of teacher/education centre models. In Western Australia the traditional resource centre

funded by Consolidated Revenue is usually known as a Teacher Centre, while the more recent and more innovatory centres funded by Education Commission funds are known as Community Education centres. The Fremantle Community Education centre is described in some detail in a later section of this report, Part Three Section 10.0.

7.2 EXTERNAL MODELS

External in-service education models are initiated and implemented externally to the school and are not directly related to the immediate classroom situation.

Professional organisations

Professional organisation related activities are one type of external model. Since a characteristic of a profession is that it takes responsibility for controlling and maintaining the quality of its membership, the increasing professionalization of teaching implies a need for professional organisation-related in-service education.

Skilbeck (1977) described subject associations in Australia as having been and continuing to be a major force in in-service education. They are most active in offering short programmes, normally out of school hours, relating to curriculum content and teaching techniques. Whereas previously funds for programmes came from membership and admissions, and were therefore limited, Schools Commission funds have allowed them to expand their activities. As well as specialist courses, some associations host national conferences sometimes preceded by search studies of developments and needs in their area of concern. Other associations provide a valuable forum for teachers and self help curriculum materials through their specialist publications.

Light (1979, p.65) complained that subject associations remain involved primarily in traditional activities and suggested they should extend into other areas. (For science associations, in particular, he suggested they should consider the possibility of mounting public lectures, summer schools or vacation safaris.) Some of the Schools Commission funded in-service education centres have become venues for subject association activities and some of the programmes offered in these centres go beyond courses, workshops and seminars, and may include work-study visits and trend reports on current developments in overseas countries.

An innovation in the U.S. is the more comprehensive involvement of professional associations (e.g. the N.E.A.) in in-service education. An example of this tendency is their involvement in

finding out needs, such as by conducting surveys of current in-service practices and teachers' assessed needs for training. They are also becoming involved in the training product business, e.g. producing resource models such as the International Reading Association's Competency-Based Teacher Education Model (Nicholson 1976, p.13).

Formal institutional

Formal award in-service courses are offered by institutions such as universities and colleges of advanced education for teachers to upgrade courses or to obtain degrees, post graduate diplomas and higher degrees. These courses are sometimes referred to as post experience courses. Teachers enrolling in them may be teachers originally appointed as two or three year trained teachers who feel the need to upgrade their qualifications to enhance skills for job security or promotion.

Teachers attending formal award in-service courses may be given study leave to attend full time or part-time or may attend lectures out of school hours. Apart from the study leave provision, teachers are not usually funded while enrolled in such courses. However, there are instances of occasions when participants in long courses have been given credit towards an award programme by the decision of the college of advanced education concerned, e.g. the Learning Assistance Teacher Scheme mounted at Mt. Lawley College of Advanced Education. In 1978, the Schools Commission estimated that 1% of the Australian teaching force was on study leave in that year. Between 1975 and 1978 the number of students commencing post experience teacher education courses at colleges of advanced education increased by 85% (Schools Commission, 1978, p.28).

There is a trend in some countries towards the use of a 'fading certificate'. The aim of such a concept is to stimulate the continuing growth and self improvement of teachers. It implies that teachers must renew their certificates periodically or these lapse and contracts may not be renewed. Tasmania is currently experimenting with this idea. Hendrickson and Viviant (1978, p.655) described how the fading certificate works in the State of Minnesota, where since 1973 teachers have had to renew their certificates every five years by presenting evidence of one year's successful teaching experience and of having earned a certain number of renewal units. These are granted by a local evaluation committee for college course work, attendance at professional meetings, supervision of student teachers and similar activities.

Self directed

In the self directed approach to in-service education, the teacher is seen as self motivated in seeking his own professional development. Whereas this in-service is initiated by the teacher, it often cannot occur without the existence of certain enabling factors, such as educational resources or time provided, for instance, by the schools. Teachers may be given release time from classroom duties for courses, workshops, conferences, research. Although surveys indicate that teachers generally prefer release time (Joyce, 1976, p.18), release time becomes expensive when it is more than short term and teacher replacement is necessary.

The literature indicates that the longer term courses are preferred by teachers and that these are more efficient when a behavioural change, or change of attitude is required rather than a less fundamental change such as of technique.

In Western Australia the percentage of shorter courses conducted in school hours was 20% in 1976 (Schools Commission Issues, 1979, p.30). This percentage was lower than in other states. Across all states approximately half of all short courses or workshops are held out of school hours but the majority of long courses are held during school hours. Overall, approximately, 65 to 70% of in-service education provided through Commonwealth funding is on days when participants would normally be teaching.

The format for courses has undergone change and providers have become aware of the short-comings of the straight lecture and of the traditional course situation, i.e. that the model is content centred rather than child centred, that teachers participating follow their own interests rather than the interests of the school, that the activity takes place off site and that it is generally not perceived by teachers as being effective (Bacon, 1980, p.2).

The sandwich course is an innovation from the United Kingdom now popular in Australia. Examples can be found in the courses offered by the Teacher Development branch in Western Australia. The 10 day in-service course organised by the Western Australian Institute of Technology, School of Teacher Education, in October 1978 (Dunn & Lane, 1978) is also an example of a course using innovatory strategies. Teachers participated in an initiated discussion regarding needs and also resources available in their schools. The course proper was then spread over two months, incorporating a 5 day session, followed by a 3 day session and a 2 day session after intervals. There were three participants from each participating school and they were required initially to devise a programme suitable for their respective schools. The in-service course involved working together on the initial courses, devising solutions to problems as they arose.

The Queensland Whole Term Release Programme is an example of a long course initiated by the employing authority, the Queensland Education Department, as a refresher course to upgrade teacher competence. The initial exercise was carried out in 1975 when 210 Primary teachers were released for in-service courses for twelve weeks of school time. The specific suggestions for course components included a study of curriculum development based on educational philosophy and theory with some attention to subject integration, metholodogy with emphasis on innovation, open education, the use of instructional media and group procedures. Courses were offered at four Queensland colleges of advanced education by staff borrowed from the pre-services areas or seconded from other areas. Participants were selected from teachers who had left college eight to ten years previously, although they were later selected on the basis that three were available from any one school. A pool of replacement teachers was created and replacement funding meant that independent schools could be involved. No formal follow-up was organised and no evaluation or assessment of participants except for a feedback questionnaire which indicated that 90% of respondents felt there had been significant changes in their understanding of the processes of education. Soft data indicated that the general feeling was that the courses had been successful although those at colleges which allowed teachers to contribute their own expertise to the design of the courses were more successful than the ones where teachers were not involved. The Whole Term Release Programme was abandoned because of lack of finance and an insufficient number of teachers with sufficient length of service to warrant attending the courses. In 1977 a modified version was reintroduced in which teachers participating were to be trained as change agents to reach a wider population (Batten, 1979, p.253 and North Brisbane College of Advanced Education, 1978).

In the United Kingdom an innovation in self directed in-service education was the emergence of television as a medium. The Open University is an area not yet explored in Australia. In the United Kingdom the institution contains a post experience unit which is responsible for production of courses in partnership with other faculties and another unit, Educational Studies, which on its own provides courses in the educational area and in in-service education specifically, covering topics such as Methods of Educational Enquiry, School and Society, Content Design and Development (Cashdan, 1974, p.10). The use of television has not quite lived up to the promise held out for it and in the case of the Open University, this facet of the courses is regarded by some educationists as primarily 'window dressing'.

The Sydney Micro Skills audiovisual programmes, produced by the Department of Education, University of Sydney, is an innovation in the area of closed circuit television. The programmes are videotape based courses on specific teaching skills for use in pre-service and in-service teacher education programmes for

primary and secondary teachers. Behind the scheme was the concept of micro criteria of teacher effectiveness, the effectiveness of small, specifically defined aspects of the teaching act, and micro teaching as a means of developing the skills in teachers (Turney, 1977, p.205). The aim of the courses was to facilitate the acquisition of the skills through observation, practice and evaluation. The skills selected to receive attention were determined after assessment by questionnaire. These skills included questioning, classroom management and discipline, variability/varying the stimulus, reinforcement, explaining/exposition, set induction/introductory procedures, small group teaching, developing thinking, individualizing teaching. The materials produced consisted of videotaped and filmed teaching episodes modelling the relevant teaching skills, and printed materials relating to each skill, covering aspects such as a review of research and theory, a statement of principles and practical suggestions for its implementation. Prototype courses were field tested and were revised after feedback from potential users. Although they were initially greeted with some opposition they appear now to have gained wide acceptance. Part of their success may be in the fact that they were not conceived as a tightly structured system, but rather as a resource.

A different perspective on the possibilities available for in-service education comes from an analysis of the methods which can be used. Since most of these are incorporated into models such as those already discussed they need not be examined in detail here. However, it may be useful to set out a brief typology including traditional and innovatory methods, such as the following from the O.E.C.D. (1978, p.39).

a. Consultancy: this may be organisation development or the Tavistock approach for school organisations, counselling, micro counselling, clinical supervision for individuals.

b. Problem solving user: staff development, allocated days for staff conferences, demonstration teaching including team teaching, and resource centres.

c. Analytic skills: including self rating scales and self monitoring devices; classroom analysis techniques, traditional and phenomenological; tools for analysing curriculum innovations and for institutional self analysis.

d. Simulations: critical incidents, case studies, in-baskets, micro-teaching, case conference techniques, protocol materials.

e. Competency based methods.

f. Training packages: these include packages which aim at staff development, training for change, pedagogical skills like reading or particular subjects like science.

8.0 EVALUATION OF IN-SERVICE EDUCATION

"Evaluation is the assessment of merit; it serves both decision making and accountability" (Stufflebeam, quoted by VISEC, 1976, p.1).

In Britain by the end of the 1970's, after the great expansion of in-service activity of the post James Report years, several factors contributed to a sudden awareness of the need for a thorough evaluation of in-service education. The first factor was that the size and speed of the expansion and the many innovations involved, had created a piece-meal approach which now required co-ordination and rationalisation. Such rationalisation became more imperative with the new climate of restricted expenditure on education in general and the consequent demand for accountability to justify the appropriation of public finances for in-service education (Henderson, 1978, p.45).

The second factor arose from a large scale survey on teachers' perceptions of in-service courses (Lodge, 1979) which indicated that only 29% of respondents favourably received the existing provisions. This disappointingly mirrored the results of surveys conducted prior to the period of development (Bailey & Braithwaite, 1980, p.203). This factor in conjunction with the previous one led authorities to wonder about the overall value of in-service education and what effect it was really having on educational change.

On a smaller scale but with wide implications, attention was being focused on the process of in-service education rather than on generalised outcomes, on decision making rather than accountability. The introduction of innovations but also the expansion of more traditional strategies of in-service education, caused those with the responsibility for organising in-service activity to become aware of a need for evaluating the programmes they were offering, or with which they were involved, in the sense of monitoring the activity and determining its future direction. This aspect of evaluation is described by Scriven (1967, p.43) as 'formative' evaluation. It implies continuous feedback or monitoring of performance to allow for the detection and correction of deficiencies as programmes proceed, whereas the evaluation concerned with accountability determines the worth of the activity when it is completed. This latter type of evaluation is referred to by Scriven as 'summative' evaluation. Formative evaluation, rather than summative, implies appraisal of the value to the individual teacher so that he/she can judge the relevance of in-service activities to his/her own professional growth, and is especially related to the problem-solving strategy of innovation.

Australia is now in the same situation as described in Britain. A similar need has arisen for a greater emphasis on evaluation.

Although some state departments of education incorporated evaluative studies as part of their own programmes (for example, Queensland) and although some wider scale evaluative surveys have been produced (for example, for the O.E.C.D. survey of innovations in in-service teacher education in member countries), the only recent evaluative studies have have been one produced for the Schools Commission, (1979), in an examination of its own programme, and the Bassett survey (1978/9). Data from Western Australia and data relevant to Western Australia have been obtained from some of these evaluations.

Before examining possible strategies for evaluation and contemplating directions for future evaluation activities, it may be useful to describe what has taken place in this area in terms of the type of strategy used and the actual findings.

The objectives of the Schools Commission Evaluation project described by Batten (1979, p.4) were

- to determine the degree to which demands and needs for developmental activities were being met;
- to obtain evidence on effects of activities carried out under the programme on individuals and schools involved and to provide detailed evidence about particular activities identified as important developments;
- to determine the extent to which the operation of the programme incorporates the emphases of the Schools Commission;
- to identify factors that militate for or against those emphases being incorporated in in-service activities.

The above emphases included the inter-system character, devolution of administrative responsibility and involvement of participants at all stages of planning and implementation for in-service activities, the broadening of the base of the programme to include ancillary staff, parents and community, the development of longer courses, the provision for needs of specific groups (teachers of migrants, aborigines, children with learning difficulties, etc.), the development of more effective in-service methods and techniques. The major part of the evaluation project was a questionnaire survey of Victorian teachers of State and Catholic school systems and representatives of parent organisations. The questionnaire was designed as a re-run of the 1974 Victorian In-Service Committee evaluation in which a population of 1,000 Victorian teachers was used. The majority of the 1977 population came from teachers involved in the 1974 sample.

Findings from the two sets of data were compared and some

results were interesting, if disappointing. Asked if programmes helped them to cope with problems or to introduce change in the classroom, teachers responded positively both times, but with an increase in frequency of only 3-4%. For their sources and reasons for change, teachers both times gave in-service education as a prime motivating factor. Other important factors were reading, the influence of other teachers and self motivation which appeared as an unexpected factor. (It was the most frequently mentioned reason supplied in the open-ended part of the questionnaire).

With reference to the type of programmes preferred by teachers, classroom based action research programmes with consultancy support were ranked higher as a strategy than other consultant type strategies. Consultants in general were of most help to primary teachers. Only moderate support was given to teachers' centre activities, residential programmes and whole term programmes. It was found generally that teachers were supportive of Schools Commission encouragement of school-based teacher development, although short courses were most popular as a form of in-service. Teachers preferred practical sessions or workshops to lectures and welcomed opportunities for formal and informal discussion with experts and peers. Their first preference was for courses held during school hours, and second for full time release. There was a significant shift between 1974 and 1977 towards in-service activities held within the school.

For actual courses attended, secondary teachers attended fewer than primary teachers in both 1974 and 1977, although the average number of courses attended had almost doubled. Teachers were consistent in the high degree of support they gave to the concept of in-service education as an essential part of a teacher's professional life. They wanted to be consulted about the content of the programmes but were less enthusiastic about assuming full responsibility. The four most important reasons given for participating in in-service activities were to learn new teaching methods, to exchange ideas with other teachers, to update subject areas and, less significantly, to learn about educational technology. The least important reason given was to gain promotion. Factors against participating were difficulty of staff replacement, personal responsibilities, reluctance to break continuity of teaching programmes and lack of relevance of programmes to teaching. For country teachers, cost was also a factor.

Finally the priorities and problems in the area of in-service education were the same in 1977 as in 1974. Priorities were that courses should be practical and relevant to the classroom situation and that school-based formats should be more used. Problems were difficulties of teacher release, the tendency of speakers to be too theoretical and of organizers to ignore teachers' needs. A newly perceived problem in 1977 was the lack of adequate communication between committees and schools.

The Schools Commission carried out a similar follow-up analysis of an aspect of in-service education in Tasmania. As a part of its programme in 1976 the State Development Branch had incorporated feedback forms with open-ended questions relating to its seminars, but no analysis of this data had been undertaken. In 1977 the Schools Commission took over the analysis of this data and, as in Victoria, sent out further questionnaires to teachers previously involved in providing the feedback. Comparison of the two sets of data revealed that 75% of respondents recorded gains or changes in knowledge, skill or attitude because of in-service activity. The types of changes implemented were still described as practical ideas or new teaching methods but in 1977 other facets were included to give a more even response. Planned discussions and workshops were important sources of ideas implemented in both years, but by 1977 informal discussions and demonstrations were seen as more important and excursions as less so. School-based discussions were not mentioned in the earlier situation but were popular later. Constraints in both cases were similar, i.e. lack of space, time and materials, but the constraint of large class size became much more important in the work situation in 1977.

A comparison of the findings from Tasmania with Victoria, indicates that in-service courses in both situations were the most positive factor influencing professional development. Study and reading in both cases were second. The highest rating for type of strategy preferred in both cases was for school-based organisation and curriculum activities and the second was for longer workshops, although short conferences in both rated highly. As in Victoria, two thirds of the respondents to the Tasmanian questionnaire had been involved in school centred development activity. Unlike Victoria, Tasmania gave a high rating to inter-school visits as an in-service activity. (These are an acknowledged part of the Tasmanian development programme.) As in Victoria, self motivation was mentioned as a force in seeking professional development.

Queensland has been involved in fairly comprehensive evaluations of its own State directed in-service activity. Although the strategy is different, as in the Victorian and Tasmanian projects its study of 1976 incorporates a comparison with a previous project, the Briody study, of content areas and trends in in-service education (Dore and Logan, 1976). The 1976 project had as its objective to ascertain the most appropriate and effective forms of employer initiated in-service education for primary personnel in the Queensland State Education Department. This was to be achieved in four stages:

- identification of perceived and real needs for in-service education;
- development of policy guidelines for decision making;

- implementation of strategies to meet the identified needs within the policy guidelines;

- the monitoring of policy and strategies.

In the first stage, questionnaires were sent to one thousand educational personnel, including teachers, principals, advisory teachers, and inspectors. The questionnaires contained open-ended questions on perceived needs, some questions which were directly comparable to those in the Briody report so that degree of stability would be determined, some open-ended questions on in-service and some on the future direction of in-service. The strategy of the evaluation exercise was then to use the open-ended items obtained from the questionnaire. These were checked for completeness in a brain-write session and then grouped independently by various people and collapsed into fewer items. The revised items were sorted into categories which emerged as organisation development, professional development and staff re-training, classroom practices, planning and execution of in-service. These needs were said to now represent perceived needs. In order to derive real needs from these perceived needs they were rearranged in terms of priority by various groups of education department personnel, e.g. city teachers, country teachers, inspectors, advisory staff. These groups met separately in individual hierarchy building sessions and a computer based approach was used (Interpretative Structural Modelling). After a process of making pair wise comparisons the results for each category were displayed as a graphical representation of a hierarchical tree with the major focus placed above lesser concerns.

A preliminary finding from the analysis of the data from both of the questionnaires discussed above was that there was stability over time. In the composite organisation development hierarchy, the major focus was found to be on the school as a functioning unit and the importance of its climate. This hierarchy suggested the need within Queensland primary schools for increased opportunity for school staffs to interact and to develop interpersonal communication and decision making skills, and the need for the development of managerial skills by school administrators to facilitate such interaction. The major priorities sanctioned in the classroom practices hierarchy were the ability to diagnose learning difficulties and the development of appropriate remedial programmes, teaching for concept development and teaching for value development. The professional qualification and staff re-training hierarchy identified a supra-ordinate concern with developing the ability to analyse one's own professional performance; subordinate concerns were the opportunities to study the theoretical bases of teaching and new curriculum programmes and materials, provision of refresher courses for principals and inspectors, and the opportunity to upgrade qualifications. In the in-service planning and execution hierarchy, the two main forms of in-service education favoured were school and teacher-centre

based programmes with considerable local initiation, conducted wherever possible by local staff, but with ready access to external consultants and other assistance on demand (Logan, 1979, p.17).

Recommendations arising from the project were that school based- and school-focused in-service should be encouraged, that guided self analysis and problem solving strategies should be used, not the teacher defective model. Each school should be encouraged to initiate its own in-service programme and the system should provide support to this endeavour. Consideration should be given to the whole issue of communication about in-service education within schools, between schools and regions and between central office and its agencies, and greater resources should be allocated directly to the regions on a triennial basis. Programmes which were supported because of the data obtained from the project were the Whole Term Release project, the In-depth Curriculum Studies project, the Whole School Withdrawal scheme and Curriculum Development teams.

The New South Wales Education Department has produced evaluative data for several regions (St. George, 1978; South Coast, 1978; Hunter, 1979). Although not directly comparable because of their different methodologies and populations sampled, some aspects of the data obtained are useful for comparison. It was found that 26% of the Hunter teachers, 19% of St. George and 30% of South Coast teachers had not attended any course in the period under survey. (Differences arise in the proportions because secondary teachers were not included in the St. George sample). Single day workshops, lectures, and discussions were preferred generally, followed by activities within the school of up to 3 days duration. In all reports, teachers felt that they had gained professionally in obtaining the following:

- new ideas for classroom management teaching styles;
- better understanding of the syllabus;
- greater competence in the use of hardware and other materials;
- increased confidence.

A cause for concern in all areas was that there was no feedback or follow-up after participation in in-service training and that dissemination of ideas from participation in more than half of the schools was left up to the individual teacher. Regarding future needs, responses were diverse but there was a demand for practical courses and no real demand for academic or philosophic subjects. The Hunter survey revealed that most schools reported sending information on to Parents and Citizens associations. The Hunter region also gave as the main reason for attending in-service courses, teachers' personal interest, although needs of the schools and suggestions from the principal

had some significance. Finally, advisers appeared to have had some impact especially in the Hunter, and teacher centres had some impact in St. George. In all areas visits to centres were on the initiative of the consultant rather than the teachers (Clark, 1980).

The surveys described above are not based on Western Australian data but could be considered relevant to the local situation. Skilbeck in his work for the O.E.C.D. (1977) included material from Western Australia. His observations were mainly from secondary sources but agree with the kind of findings which will be discussed later in the section on Western Australia, Section 10.0 of this report. They indicated that as at 1976 the local situation was directly comparable to the scene in other states, the only real points of difference being that the inter-systemic nature of in-service activities was more highly developed then in Western Australia than in most other states; State development branch activities appeared to be more strongly directed towards employer initiation; and evaluation was relatively neglected.

The most recent nationwide survey was carried out by Bassett in 1979. In this survey questionnaires were sent to a sample of 10,000 teachers (Bassett, 1980). Although the survey was designed to follow on from one undertaken in 1963 there was no section relating to in-service education in the earlier project. Bassett's survey is particularly useful in that it sets out earlier State comparisons as well as providing a nationwide summary of the responses. The comparisons relevant to Western Australia will be described in Section 10.5. They are in keeping with those of Skilbeck. Salient findings from the survey were as follows:

- Participation rates - 13% of Australian teachers had completed or were engaged in formal courses during 1978/9. The most commonly attended non-award activities were those lasting less than three days.

- Location of non-award courses - the most common location was in a teachers' centre and primary teachers were the greatest users of them, while secondary teachers used locations at tertiary institutions.

- Timing of courses - the majority of teachers attended in-service courses in school time.

- Responsibility for organising courses - the following four were rated highest:

State or denominational regional offices	24%
Teachers' own school	23%
Professional associations	20%
Teachers' centres	20%

The following four were lowest:

State or denominational central offices	6%
Colleges of advanced education	4%
Universities	2%
Teachers' federations or unions	2%

General orientation of courses -

Emphasis on whole school	26%
On a section of school	13%
On individual teachers	29%

i.e. the greatest emphasis was on whole school development, although this was more the case with primary teachers than with secondary.

Themes of non-award courses and percentage attendances were

Curriculum	54%
Teaching methods	37%
Administration	17%
Community relations	8%
Multicultural education	7%
Teaching handicapped children	4%

It was determined that older teachers (31 years and more) were more likely to attend administration courses, and marginally more likely to attend curriculum courses.

In Bassett's review of his findings he highlighted the fact that there appears to be a balance between school development and individual teacher development programmes, and that most courses were undertaken in school time. Since these aspects of in-service are generally regarded as desirable, the findings are significant. What is lacking is an analysis of outcomes or teacher change resulting from the activities and more specific data on initiation of courses. Bassett suggests that data on responsibility for organisation of courses may indicate that initiation could come largely from grass roots level but this might not necessarily be the case.

It would also appear that teachers do perceive that they gain some benefit from in-service activities. The British finding that only 29% of respondents favourably received the existing provisions (Lodge, 1979) and similar United States findings that teachers perceive in-service as "irrelevant, ineffective and inefficient" (von Eschenback, 1980, p.253), are not replicated in Australia.

Apart from those above, other findings from the local surveys seem to be in accord with findings from overseas, although research overseas may go further than any of the local projects. For example, Johnston and Yeakey (p.235) from their own research

and the work of others drew the conclusion that the most effective development programmes were those which included cooperative administration and staff planning, flexible goals, available resources, accountable implementation, effective communication and follow-up evaluation; that such programmes should take place at the local level and deal with the daily problems of teachers.

Most of the information available in Australia has been obtained through questionnaires. The validity and reliability of a questionnaire may be questioned, but most of the questionnaires described above were designed to follow on, at least in part, from previous questionnaires and the results were compared. Some significance can be attributed to the findings. The major findings with relevance for future directions are concerned with needs for in-service. There is a problem in that studies seem to suggest that needs reported by teachers and needs as assessed by other means do not match. That is, teacher responses on needs surveys do not yield the same information on teacher needs as that gained through other means, e.g observation, formal testing of knowledge, and interviews (Bacon 1980, p.4). The Queensland project of 1976 may overcome this problem to some extent with its combination of questionnaires, brain storming technique and group discussion by disparate groups (for the building of hierarchies of need).

Separate from the area of need is the problem of obtaining hard information about the effects of actual programmes. An analysis of outcomes or products may be thought to be essential in evaluating the affects of in-service programmes and in deciding what programming strategies seem to be most often related to successful in-service programmes. This type of evaluation may involve a follow-up judgement by participants at the end of a course, and examples of this approach in Australia are common. Evidence shows that the instrument deteriorates over time (Bacon, 1980, p.5), but even if this is allowed for, such as in the Tasmanian repeat questionnaire, there is no evidence to support the validity of self reported changes in teachers' behaviour (Bolam, 1980, p.40). There is also no factual data available on whether responses obtained from follow up evaluation lead to modification of programmes or change of direction.

Henderson (1978, p.50) mentioned four distinct areas in which change may take place in the individual as a result of exposure to in-service education. These include: knowledge; teaching skills; attitudes; and internalised feelings, motives and aspirations. (It is not implied that these are not interdependent to a certain extent nor that they form a hierarchy.) The classification is useful in considering techniques for measuring change, and these are available at least for the first three areas. The measurement of knowledge by examination, etc, is relatively easy but not very useful in this context, firstly, because knowledge becomes obsolete, and

secondly, because the weak teacher is less likely to be one who lacks knowledge, than the one who lacks the ability to apply his knowledge to the actual development of skills involved in teaching. Internalised feelings, motives and aspirations lie outside the scope of reliable, valid measurement techniques. For the measurement of attitudes, reasonably objective measurement techniques have been developed and much attention has also been focused on the measurement of skills. Measurement of these two aspects however still involves some difficulty. Educational measurement techniques were developed in a norm referenced mode and norms are usually not available to the in-service educator, nor are they particularly useful in a judgement on the value of a programme to an individual. Establishment of norms or criteria also involves value judgements, such as of educational or social desirability, but with regard to a teacher's role there is no universal set of expectations, only the expectations of particular reference groups (Henderson 1978, p.51).

In spite of these reservations measurement is useful in relation to attitudes and teaching skills. Measurement of attitudes using such devices as semantic differential scales, the MTAI, Rokeach scales, etc., is discussed by Henderson (p.138-150). In the in-service area, besides measuring attitudes towards, for example, types of in-service, there may also be the necessity to measure attitudes towards change. A questionnaire to ascertain attitudes towards change was given to teachers in Australian schools in 1968 by Warry and Fitzgerald (1969), but little has been done recently in this area.

For the measurement of skills, some of the most commonly used techniques of evaluation include direct observation of classroom teaching by means of interaction analysis, rating scales, numerical and graphical scales and check lists. Indirect means include the use of questionnaires, interviews, and scrutiny of assessment results (Otto and Gasson, 1977, p.38).

Another way of obtaining this information is from a competency measure. To use this approach it is necessary that the defined competency is tied to a validated and confirmed relationship with a pupil outcome. Bolam stated that experience in Europe indicates that it is rarely feasible to use such a sophisticated instrument because of the expense, the difficulty involved in the behavioural approach and because programme improvement data is obtainable from other methods. Borich (1977) indicated that as at 1977 in the United States, educationists were still identifying and validating teacher competencies rather than using tested instruments. Problems with using such instruments include the necessity to examine stability over time and to make decisions relating to who should do the rating - the teacher himself/herself or the students through the examination of outcomes, neither of which is usually recommended; the students through examinatin of process; or an independent observer. Some models of in-service education may

include the determination of objectives and evaluation of outcomes as an integral part of the strategy. School-based, school focused, in-service education implies that objectives are decided by the teachers involved rather than imposed from above.

Henderson (p.151-176) suggested that self instructional systems, as provided by some micro teaching courses, are valuable for the following reasons:

"1. They are an effective means of improving the use of specified teaching skills in the case of experienced teachers;

2. Improvement in the use of these skills can be transferred to the normal classroom and improvements are retained;

3. Experienced teachers view the use of these self instructional techniques favourably and consider such skill training useful;

4. Perhaps the most important effect of these courses on experienced teachers is that they motivate teachers to re-examine their classroom behaviour and encourage them to continue with the analysis of their teaching after the course of training is over." (p.171)

Measurement is useful then to evaluation exercises and suitable techniques are readily available, some traditional and some innovatory. However, measurement should not be the only instrument for evaluation. Observations designed to make judgements on presence and direction of change, and relationships between changes should be incorporated.

One avenue for evaluation to take can thus be towards goal oriented evaluation. The problems associated with it are that it implies the specification of objectives and the determination of the extent to which the objectives are achieved. The difficulties associated with this approach include the determination of who selects the objectives and how outcomes are to be measured; it implies the specification of objectives in advance which may not be desirable in in-service programmes; and content and learning experience may become subservient to goals if the activity is seen only as a means to an end. The goal orientation concept has also been broadened. Stake, for instance, suggested that instead of concentrating on goals, antecedent, transaction and outcome data should be considered (Henderson, 1978, p.57). Evaluators must use both description and judgement. Difficulties arise when concerns of goal oriented evaluation extend in this way to include intended teaching as well as intended learning concerns. There is a necessity for the evaluator to restrict his variables by seeking contingencies and congruencies.

Alternatives to the goal oriented concept are Scriven's goal-free evaluation and Paulett and Hamilton's illuminative evaluation, described by Henderson (p.65). Scriven's approach is not concerned with goals but only with effects relative to the needs of the consumers. Illuminative evaluation takes account of interaction, relating changes in the learning milieu to the intellectual experiences of the learners, i.e. the relationship between organisational patterns and responses of individuals.

In considering the various alternatives available for evaluation, the major consideration is whether product data is wanted or whether process data is more useful. Bolam (1980, p.40) indicated that there has been a shift towards a participatory in-service education model in which the characteristic features are:

> " the broadening of the field of evaluation so that product evaluation is just one of the components;
>
> . INSET and INSET evaluation as an integrated part of the total school development programme;
>
> . evaluation programmes as decentralised, group focused and field centred activities;
>
> . INSET evaluation as an information service to the participants about the characteristics of the School's whole development programme and thus a basis for participatory planning and decision making."

The shift to a participating model as described by Bolam implies an emphasis on process evaluation rather than on product and outcomes. The distinction between process evaluation and evaluation of product is similar to Scriven's distinction between formative and summative evaluation. It would appear that both types of evaluation should be integrated into the in-service activity, the formative evaluation being incorporated into each individual programme, the summative evaluation incorporated into the cycle of in-service described sometimes as "ASSESS, ASSIST, ASSESS" in which assessment of a previous programme or series of programmes leads to the mounting of a further programme with modifications arising from the assessment.

Before any further expansion into the field of in-service teacher education in Western Australia from whatever source, summative evaluation is needed, as attention to this area previously, has been scant. Some aspects of the existing in-service education provision about which not enough is known, include:

> . whether in-service education is actually taking place in the schools without intervention from outside organisations;

- what is the attitude of teachers towards change;
- whether teachers feel that the teacher's role has changed and consequently the teacher's tasks;
- whether they feel the need for in-service education to allow them to cope with the changed role and tasks;
- whether teachers feel that there is a need for expansion in in-service education or whether they feel existing provisions are adequate.

PART THREE : IN-SERVICE TEACHER EDUCATION IN W.A.

9.0 HISTORICAL OVERVIEW

References to in-service education in the Annual Reports of the Education Department of Western Australia give an indication of the changing emphases and growth in provision of in-service education over the last thirty years. Up to the 1950's in-service teacher education in Western Australia was not organized on a formal basis and responsibility for organising courses was mostly taken by personnel from the Claremont Teachers College. In 1951, for example, staff organized a refresher course for experienced teachers. In the same year a senior staff course for Head Teachers of class II and III schools was held to discuss recent developments in education. Payment was sometimes made for teachers to travel and study overseas.

During 1959, the Superintendent of Special Services took over the field of in-service training from the Teacher Training division and a new policy was developed whereby short in-service training programmes were conducted in various centres in the State, for groups of teachers at different levels and in various fields. In 1960, 714 teachers from the primary and secondary sectors attended courses held in the city and in the country and throughout the early 1960's there was a continual expansion in this activity. Courses were conducted by the In-service Branch or by superintendents, 2 day regional conferences were introduced, as were workshops for the secondary sector and 2-day metropolitan courses in place of, or as well as, the half day or one day courses.

In 1965 with the expansion in services, it was found necessary to convert the Bagot Road, Subiaco Infants' School into an In-service centre. A new teaching aids section was developed and teachers from independent schools were invited to attend courses.

In 1962 the Teachers' Union had placed an embargo on courses held during school vacations but by 1966 evening and vacation courses had been introduced and some travelling and accommodation allowances were paid. Information about courses was disseminated through an In-service booklet which began to be produced at this time.

In 1968 the Independent Schools' Education Committee (ISEC) was founded "to provide opportunities for closer contact among Independent school teachers by encouraging the further development of professional competence among teachers" (Batten,

1979, p.13). Between 1968 and 1974 ISEC organised 200 lectures and workshops which were subject and skill based. At the same time, the In-service branch continued to conduct one day courses and workshops, two day regional conferences, vacation courses and evening classes. Five day residential camps at Port Peron were introduced.

In November 1973 the five Teachers Colleges then in operation became autonomous and a Superintendent was appointed to liaise between the Department and the Institutions. An area of concern at this time was the need for a closer relationship between pre-service and in-service teacher education.

By 1975 after the Karmel Report and the implementation of its recommendations, there was a new upsurge in funding and interest. Courses were being organised under the State Government In-service schedule and through the Schools Commission Teacher Development proposals. Educational resource centres were established at Bunbury and Albany and education officers were appointed to organize courses in the regions. There was also a change of emphasis to residential conferences and some longer courses, up to 3 weeks in length, were introduced. Activities included refresher courses, diagnostic and remedial courses, and visits by advisory teachers, especially in country districts.

In 1975 a decision was made to regionalize the organization of the Education Department and by 1976 twelve regions were designated and allocated to regional superintendents, each having its own resources for teacher development. (Eight of these regions were in rural areas and four metropolitan). Outside the State government sphere an education officer was appointed in 1976 by the Independent Schools Education Committee to set up contact with schools.

By 1977 in-service education was known as Teacher Development and the emphasis was placed on the provision of courses and conferences through regional offices and on an increase in longer term courses. These were designed to increase within-school expertise in such areas as curriculum development, remedial education and resource based learning. Courses of ten days or more were introduced, some extending to twelve months duration such as the Special Education courses. Funding through the Schools Commission Services and Development Committee provided for 133 courses in that year.

In 1979 there was an extension of activities relating to the Priority Schools programme. In Teacher Development the trend to longer courses with teacher replacement continued with thirty long courses in 1979 compared to fourteen in 1976, and the Educational Projects scheme was widened to include funding for local projects as well as for interstate travel and study.

In 1980, fourteen long courses were planned, eight to support curriculum revision, and participants were selected to become resource people. There was an expectation of a growing involvement of commerce and industry with teacher development and it was anticipated that tertiary institutions might also expand their involvement. Thirteen Teacher Resource/Reading centres were receiving financial support as was a Primary Science resource centre and the Teaching Aids Centre.

In 1980 there was a reduction in the level of Schools Commission funding. Apart from the areas of migrant education and multi cultural education, funding for all Schools Commission progammes either remained steady, indicating a drop in real terms, or as in the areas of Services and Development Programmes, Education centres and Special Projects, there was an actual cut in amounts financed. The Services and Development Programme was reduced by 23% between 1976 and 1979 and a further 26% on 1979 levels in 1980.

One important recent change is the relaxation of the ten-day rule for teacher replacement in 1982. Teacher replacement funding, previously available only for courses of ten days or longer, is available for courses of any length in 1982. It was felt in the overall policy review of February 1981 (p.34) that many long courses can be mounted successfully in eight or nine days instead of the ten days made compulsory to attract teacher replacement. It was also thought that teacher replacement should be funded in hardship cases to enable teachers in small schools to attend short courses/conferences. These improvements may be exceptions. The trend towards a reduction in spending appears likely to continue and will affect some areas. As an example, the number of longer courses was already decreasing in 1980 compared to the number in previous years. Short courses in 1981 as in 1980 were likely to be subsidised rather than fully funded. Joint funding decisions were said to be increasingly difficult to make and could be placed in jeopardy as differences in educational philosophies and structures become more difficult to accommodate (Schools Commission, February 1981, p.34).

10.0 CURRENT PROGRAMMES IN W.A.

The overall range of provisions for in-service teacher education in Western Australia has been summarised by the Teacher Development Branch in the following table (Table 2). The major providers are described in detail in the following sections.

TABLE 2 : IN-SERVICE TEACHER EDUCATION IN W.A.

Prepared by Teacher Development Branch of W.A.

'LONG' COURSES

TYPE OF INSERVICE ACTIVITY	INITIATOR	DURATION	PLANNING	BUDGET SOURCE	EXAMPLES
1. 'LONG' COURSE - Tertiary Institutions					
(i) Tertiary Institutions award courses		a term a semester a year	WAPSEC TEC ACAE	Private	Bachelor of Arts Bachelor of Ed. Masterates Doctorates
(ii) Tertiary Institutions award courses with teacher replacement.	Education Systems	a term	WAPSEC	Services & Development	Learning Assistance Teacher Scheme
(iii) Tertiary Institutions non-award courses with teacher replacement.	Education Systems	10-days	Teacher Development plus Physical Education Branch	Services & Development	Secondary Health
2. 'LONG' COURSE - Education Systems					
(i) Education Systems with teacher replacement	Education Systems	10-days	Computer Education	Services & Development	Schools Computing
(ii) Education Systems with teacher replacement	Education Systems	10 or more days	Teacher Development & Curriculum personnel	Services & Development	Achievement Analysis
(iii) Education Systems without teacher replacement	Education Systems	five days	Teacher Development & Music Branch	Education Dept.	Music

SHORT COURSES

TYPE OF INSERVICE ACTIVITY	INITIATOR	DURATION	PLANNING	BUDGET SOURCE	EXAMPLES
1. SHORT COURSES (Coordinated by Branch or Subject) (without teacher replacement)					
(i) Education Department (CRF) Branches - Youth Education - Library Services - Teacher Development - Guidance - Special Education - Gifted & Talented - Distance Education - Aboriginal Education - Driver Education	Branch personnel through Supt.	Usually two days or less	Branch personnel in consultation with Branch Superintendent	Education Dept. Branch Funds	Guidance Branch Counselling Assistants' Parents Effectiveness Workshop
(ii) Education Department (CRF) Subject (Primary & Secondary) - Science - Mathematics - Social Studies - Business Education - Physical Education - English - Computer Education - Health Education - Drama Education - Home Economics - Manual Arts - Speech Education	Branch personnel through Subject Superintendents	Usually two days or less	Branch personnel in consultation with Subject Superintendents	Education Dept. Teacher Development Branch Funds	Home Economics Management and Family

continued over

2.	**SHORT COURSES (By Application)**					
(i)	Centrally Approved Services & Development	Applicant	Usually two or less days and includes out of school time	Applicant	Services & Development	Large range of activities
(ii)	Multicultural Education	School or Individual	Usually two or less days	School or Individual	Multicultural Education Advisory Committee	Promoting multi-cultural education
(iii)	Priority Schools (also Country)	School or Individual	Varies	School or Individual	Priority Schools	
(iv)	Tertiary Institution	Institution Personnel	Varies	Institution Personnel	Tertiary Institution	Claremont Reading
3.	**SHORT COURSES (Regional)**					
(i)	Regionally Approved	Regional personnel in consultation with Regional Directors/ Superintendents	One day or less	Regional personnel in consultation with Regional Directors/ Superintendents	Education Dept.	Large range of activities
(iii)	Regionally Approved Services & Development	Applicant	Out of school time, may include weekends	Applicant	Services & Development	Large range of activities
4	**SHORT COURSES (Other)**					
(i)	Community Taskforce	Community Taskforce	Three days or less	Community Taskforce	Services & Development	Workshop on School/Community participation
(iii)	Community Education Centres	Community Centre	One day or less	Centre	Schools Commission	Large range of activities

PROJECTS

	TYPE OF INSERVICE ACTIVITY	INITIATOR	DURATION	PLANNING	BUDGET SOURCE	EXAMPLES
1.	**WITH TEACHER REPLACEMENT**					
(i)	Grants for School-Based Curriculum Development	School or Individual	Not Specified	School or Individual	Education Dept.	Local History Rockingham SHS
(ii)	Grants for School-Level Evaluation	School or Individual	Not Specified	School or Individual	Schools Commission	Middle Swan 1980 Elements of Curriculum
(iii)	Education Projects	School or Individual	Not Specified	School or Individual	Services & Development	Dr M. Goldberg Visit to W A
(iv)	Commonwealth/State Transition Education Programme	Applicant	Not Specified	Applicant	Transition Education	School-based in-initiatives towards school to work
2.	**WITHOUT TEACHER REPLACEMENT**					
(i)	Alternative Upper School Course-Special Purpose Grants	School or Individual	Not Specified	School or Individual	Education Dept.	Merredin SHS - Poultry Run
(ii)	Multicultural Education Small-Scale Grants	School or Individual	Not Specified	School or Individual	Multicultural Education Advisory Committee	John Curtin SHS - Resource Collection
(iii)	Multicultural Education Large-Scale Grants	School or Individual	Not Specified	School or Individual	Multicultural Committee	Creation and Printing or creation language materials
(iv)	School Exchange and Travel Scheme	School/ Community/ Individual	Two weeks	School/ Community/ Individual	Schools Commission & Education Dept.	SM (Maths) from Balcatta to Alice Springs
(v)	Priority Schools and Priority Country Schools Programme	Teacher/ School or Reg. Committee	Varies	Teacher/ School and Consultant	Priority Schools Programme & PCS	Goldfields TD Project
3.	**SPECIAL PROJECTS - SCHOOL COM**					
(i)	Special Projects (Innovations Programme)	Applicant	One or two years	Applicant	Schools Commission	Development of Innovative Education Programmes
(iii)	Special Projects (Innovations) Small-Scale Grants	Applicant	Up to one year	Applicant	Schools Commission	Development of Innovative Education Programmes

CONFERENCES

	TYPE OF INSERVICE ACTIVITY	INITIATOR	DURATION	PLANNING	BUDGET SOURCE	EXAMPLES
1.	CONFERENCES					
(i)	Association type	Association	2 - 3 days	Association in consultation with TD Branch	Education Dept. TD Branch	W A Primary Principals
(ii)	Annual conferences (intra - inter-state international)	Association	Varies	Association	S & D and Applications for Funding (to conduct)	Australian Reading Association English Teachers' Association
(iii)	Regional conferences	Regional Committees, Principals	Varies	Regional Committees, Associations	S & D Regional Committee Regional Office, Participants' fees.	Geraldton Principals' Conference
(iv)	Conferences addressed by overseas education authorities	Education Dept.	Varies	Departmental personnel	S & D Education Projects	Prof. M. Goldberg's visit
(v)	International conferences to which teachers are sent	Overseas Organisation	Varies	Overseas organisations	Education Dept and individual teachers	International Conference on the Teaching of English
(vi)	Conferences organised by Superintendents	Superintendents	Varies	Superintendents	Education Dept.	S. Ma/Mi Social Studies Conference
(vii)	Conferences conducted by Independent Organisations	Independent Organisations	Varies	Committees within the Independent Organisations	Unknown	Mt. Lawley C A E 'Drive-in' Curriculum Conference

INSERVICE THROUGH CONSULTATION

	TYPE OF INSERVICE ACTIVITY	INITIATOR	DURATION	PLANNING	BUDGET SOURCE	EXAMPLES
(i)	Peer and superordinate counselling in schools	Individual	Varies	Consultation between peers	Nil	Induction of new staff in a school. Superintendents'visits
(ii)	Curriculum Advisory Personnel	System or School	1/2 day segments repeated	Consultation between peers	Education Department	Social Studies
(iii)	Community Taskforce	School and/ or Community Group	Up to 2 years	Consultation between initiator and Taskforce	Services & Development	Setting up a parent resource centre in a school
(iv)	Specialist	System/ School/ Community Assoc.	Varies	Specialist with initiator	Services & Development Priority Schools Programme	Priority Schools Field Officers. Process Consultancy Project. Consultant for Gifted & Talented Programme

10.1 THE TEACHER DEVELOPMENT BRANCH

Organisational Structure

The Teacher Development Branch of the W.A. Education Department is probably the best known provider of in-service education in W.A. As at the beginning of 1982 it consists of a Superintendent, a Senior Education Officer and five Education Officers. Specialists are bought in from outside the branch to conduct courses but there is no automatic access to Curriculum Branch or tertiary colleges personnel.

The Superintendent of the Teacher Development Branch is also the Chief Executive Officer of the W.A. Services and Development Committee and he is responsible to both this Committee and to the Education Department for the coordination, planning and implementation of their respective programmes and for rationalising the deployment of resources for both programmes. Decisions regarding the funding of W.A. Services and Development Committee courses are taken by that committee.

The W.A. Services and Development committee membership consists of representatives from the Education Department, Catholic Education Commission, Association of Independent Schools, the State School Teachers' Union, Independent Schools Salaried Officers' Association, W.A. Council of State School Organisations (Parents and Citizens), Independent Schools Parents and Friends Association. The Committee has three sub-committees comprising policy and finance, planning, application and Community Taskforce. They are serviced by the Chief Executive Officer and three Executive Officers, one of whom is the Education Officer employed by the Association of Independent Schools, although funded by the Services and Development Committee. The planning and executive work entailed by membership of the sub-committees forms part of the work load of the Executive Officers. Executive implementation is achieved through thirteen Regional Committees some of which are sub-regional or local cell developments.

Although the Teacher Development Branch has involvement in both Education Department and Schools Commission programmes the types of programmes funded from these sources are best examined under separate headings.

School Commission Funds

The first category concerns the W.A. Services and Development Programme for each year using funds allocated annually by the Schools Commission. Within this programme there are various sub-categories of in-service activities. One such sub-category is concerned with centrally organised long courses which up to 1981 were required by Schools Commission guidelines to be of ten

days duration or longer, although this requirement was lifted for 1982. The duration of the courses may now vary upwards to as long as a term, and may be distributed over separate periods including initial periods and recall such as in the sandwich model. Funding in 1981 amounted to $1.3 million. Because of Schools Commission guidelines then in existence 40% of the total was allocated to the cost of teacher replacement, although here too this requirement was lifted from 1982. It is estimated that in 1981 the minimum cost for a participant was about $600 but this could rise to $4000 per head, for example, for participants in the long term Learning Assistance Teacher Scheme. So far as is possible, activities are available to both government and non-government systems participants, and in order to encourage this, funds available for teacher replacement to cover participant attendance at courses are allocated to government and non-government school sectors on a pro-rata basis based upon the numbers of teachers employed. In 1981 18% of teachers in the State were employed by the non-government school sector.

Initiative for the courses comes from within the systems, from the Services and Development Planning Sub-committees. As already described, co-ordination and planning occurs through the Teacher Development Branch of the Education Department and involves joint planning wherever that is desirable and feasible.

Emphases for the 1981 programme of long courses were:

1. Areas of curriculum development.
2. Areas of general education development.

Long courses listed as being available in 1981 were:

Aboriginal Education
Analysis and Assessment of Student Achievement:Years 4-7
Art/Craft
Careers Counselling
Computer Education
Gifted and Talented Students
Intellectually Handicapped Children
Learning Assistant Teacher Scheme
Low Achievement Students Years 8-10
Participation and Planning:Curriculum Development for the Classroom
Primedia (2 courses)
Religious Studies (2 courses)
Religious Education Curriculum Development
School Leadership and Management
Sciences Primary

Similar courses are provided for 1982, topics not included previously being:

K-2 Language Development
Manual Arts
New Directions in T.A.E. English

Different methods of disseminating advice about available programmes are used, e.g. calendars of activities are distributed to regional education offices and tertiary institutions, and advertisements are sometimes placed in the 'West Australian' or the 'W.A. Education News'.

Separate from the above courses are another group of courses funded by the Services and Development Programme but with direction by the Regional Committees of the Programme. These courses are held out of school hours and do not have allowance for teacher replacement, although this too is changed for 1982 as a proportion of teacher replacement funds will be allocated for government teachers at regional discretion. Regional access to teacher replacement for non-government school teachers is available through the Association of Independent Schools' Education Officer. The regional activities are initiated by teachers themselves, superintendents, parents, advisory personnel, etc., through application to the Regional Committees. In 1981 a total of $167,600 was allocated to thirteen regional committees for local in-service activities for both government and non-government schools. Each region was allocated a fraction of this amount on a formula based upon the numbers of teachers employed in government and non-government schools within each region, and upon distances involved in travelling to centres used for in-service. The terms of reference of the committees are to encourage and enable local initiatives in development activities outside school hours. The restriction of regional Services and Development activities to out of school hours is occasioned by school leaders' concern about teacher absences, but in reality some local discretion is possible by the use of non-teaching periods for in-service (Report to the Schools Commission on the Western Australian Services and Development Programme, February 1981, p.6). As reported above this situation is under change from 1982.

Complementing the above categories of courses are the shorter courses either funded fully through the W.A. Services and Development Committee or partly by the Committee and partly by participant fees. Funding decisions are made by the Applications for Funding Sub-Committee. These courses may be initiated by teachers, superintendents, advisory personnel and personnel from colleges of advanced education. They include school-based education projects which appear to be rising in popularity. The Services and Development programme also funds study terms and some special projects such as the Community Taskforce. The Taskforce has been in operation since 1978 and is designed to improve school community participation in children's education.

Consolidated Revenue Funds

The second category of in-service education directed by the Teacher Development Branch is of courses mainly funded through the State Consolidated Revenue fund, oriented, but not wholly,

towards the secondary sector and consisting usually of short courses of two days duration or less, which generally do not involve teacher replacement. All of these shorter courses are initiated from within the system, either by subject superintendents or by the Teacher Development Branch. Courses are mainly held in school time. Consolidated Revenue contributed $130,000 in 1981 to the funding of in-service education. The courses are run by curricular personnel or other advisory personnel (whose salaries are not included in the costs of in-service education so that a realistic total cost for this is difficult to estimate). Applications for the funding of courses are called for in October of each year and subject superintendents are usually called on to weigh the value of the suggested courses or to check their priorities (which implies that some subject orientation occurs). Most funding covers travel and accommodation costs, which are especially high for country applicants and so act against these applicants gaining a proportional number of approvals. Topics include conferences held for senior associations and induction courses for newly appointed principals.

Meeting Teachers' Needs

Bassett (1979, p.51) highlighted some differences between W.A. and the other states in their development programmes. In W.A. a much greater proportion of the Services and Development courses are held out of school hours. There is a fairly high proportion of residential courses (although not in comparison to South Australia). In Western Australia also there is more non-government school involvement (although the proportion is not as high as in N.S.W. and Victoria).

The overall model for in-service teacher education as provided through the Teacher Development Branch is a central one in terms of the determination of priorities and the allocation of State Consolidated Revenue funding and activities are planned in response to systemic needs and directions. Teacher, school, regional and community initiatives are catered for through the W.A. Services and Development Programme, centrally through the Applications for Funding Sub-Committee where they are designed across regional boundaries, and through regional committees and the Community Taskforce in other cases.

Skilbeck (1977, p.49) in reviewing in-service education throughout Australia, stated that employer initiated in-service education was originally favoured by Karmel and that there seemed subsequently to have been a shift of emphasis towards teacher initiated in-service education, e.g. the Schools Commission in its promotion of regionalisation and localisation with the resultant enhanced prospect of teacher involvement. This is true of the scene in Western Australia in so far as the

Applications for Funding Sub-Committee and the regional committee programmes of Services and Development are predominantly teacher initiated. However, the long course activities of the Services and Development Programme and the State Consolidated Revenue Teacher Development Branch programmes are generally initiated and sponsored by systems in response to their needs. Since participation by teachers in the programmes is voluntary, their response to them is an indication that needs are being satisfied. Teacher demand for in-service assistance is generally strong and particularly so in country regions. Evaluation by the Branch of reaction to individual programmes would also indicate this. However, without more hard information which is difficult and expensive to obtain it is not readily apparent whether existing provisions cover a sufficiently wide area of teacher needs and priorities. It is assumed that since ready access is available to teachers, schools and teacher associations through representative regional committees and the representative Applications for Funding Sub-Committee, needs of teachers, schools and teacher associations are either being met or are not expressed. Participant reactions to all in-service activities are sought and evaluation or reaction sheets are required as a condition of funding. Thus, unsatisfied teacher needs can often be identified in response to the experience of a particular activity.

10.2 CATHOLIC EDUCATION COMMISSION

Within the Catholic Education system there are a number of provisions for in-service education provided by the Catholic Education Commission. In 1982, three officers are engaged part-time in providing services which include consultancy services, help with the organisation of seminars and courses, and support for associations which might themselves be involved in in-service activities, specifically the Catholic Primary Principals' Association and the Catholic Secondary Principals' Association. 'The Catholic Education Circular' is used by the officers as a means of disseminating information about in-service activities, emanating both from within and outside the system. The officers are also responsible for updating and distributing the 'Handbook for Catholic Schools'.

Priorities for the services provided by the above officers are established by the Commission in consultation with school communities. Involvement includes an emphasis on religious education, partly because of the increased proportion of lay teachers now employed in the system; and there is close liaison with the Perth Archdiocesan Department of Religious Education and with the Catholic Pastoral Institute. The Catholic Pastoral Institute is responsible for organising school based adult education programmes and is associated with the Graduate Diploma in Religious Education offered through the WA College of Advanced Education. It also runs a resource centre for

schools. Apart from religious education, other priority areas include school management and leadership programmes, induction programmes for new principals and teachers, and seminars for members of school boards. Special in-service activities are provided to assist disadvantaged schools, special and multicultural education and aboriginal education.

As well as the officers involved directly with in-service education, there are school consultants who have indirect involvement. In 1982 there are eight such officers employed by the Commission. As they have direct access to the schools to which they are allocated, these consultants are in a position to become aware of needs arising in the classrooms and to make these needs known.

Apart from courses and other activities originating from the Commission, the Catholic Pastoral Institute, the Perth Archdiocesan Department of Religious Education and the principals' associations, the majority of courses are organised by individual teachers or staffs, usually with funding assistance provided by the Services and Development Committee. In cases where changes in curricula or new syllabi bring about a more general need for relevant in-service, school principals often use resource personnel from outside the system, e.g. staff members of the WA College of Advanced Education to develop courses or visit schools in an advisory capacity.

Much of the in-service activity of schools is carried out on a whole school basis rather than with individual teachers and is concerned with organisation development, goal setting and the development of school climate. Parents as well as staff are often involved in these activities.

A final avenue for in-service is through association with the Independent Schools Education Committee. This is in close contact with the Services and Development Committee through its personnel and it can set up programmes with school-based committees, college staff, etc.

10.3 THE INDEPENDENT SCHOOLS EDUCATION COMMITTEE

The Independent Schools Education Committee (ISEC) was set up in 1966 by the Association of Independent Schools at the instigation of a visiting adviser on in-service education. Its purpose was to try to foster professional development among teachers in independent schools, to arrange teacher meetings and to organise such in-service activities as may be deemed appropriate. Its prime function was to act as a co-ordinator for in-service activity between schools. It has tended to supplement the work done through the Services and Development

programmes and is partly funded through Services and Development funds. There are at present in the Association for which it acts, forty member schools, these being predominantly the larger metropolitan high schools including Catholic schools. The membership covers approximately 17% of the possible population and 70% of the members are Catholic schools.

The policy of the Committee is to initiate, promote and disseminate information about in-service education activities to the independent schools, at times to implement these activities or to work in conjunction with other in-service providers in implementing their activities. Examples of activities with which it was involved in 1981 were a workshop in Special Education, 'Experienced Primary Teachers Years 1 and 2', 'Standards' and 'Effective Equipment and Games in Mathematics and Reading.' Probably the major function of the Committee is its representation of independent schools on the Services and Development committees and sub-committees and it is also loosely affiliated with the National Council of Independent Schools. Independent Schools Education Committee membership includes a chairman, three nominees of the Association of Independent schools, a representative of the Director of Catholic Education, three Catholic system nominees, two ISSOA members, a representative of the Junior Schools Headmasters' Association, an executive officer and secretary. The committee meets six times a year. The executive officer acts in a full time capacity co-ordinating activities and distributing information to schools, etc. It was hoped these schools would each nominate a liaison officer to act as a go between with the Committee but not all member schools have taken this step.

To a certain extent ISEC initiates in-service activities but it stresses in its annual reports, for instance, that its main function is to support and encourage school-based activities initiated by the schools individually. The 1980 report stated "We recognise that it is in the school that education standards and care for students must be maintained and improved, and that it is for each school to evaluate its own progress and to take whatever action is called for in terms of its own needs and situation."

10.4 COMMUNITY EDUCATION CENTRE, FREMANTLE.

The Karmel Report (1973) made the observation "Opportunities for teachers to come together to share experiences, establish areas of common concern and plan a co-operative attack on problems can contribute greatly to increased commitments as well as to increased competence...Teacher centres under the control of teachers themselves could, if open to interested parents and members of the community, assist in the development of a more concerned and well informed public and lead to improved teacher-community liaison."

The State Grants (Schools) Bill 1973 made provision for the financing of education centres, the principal object of which was to provide an extension of the professional competence of teachers. The main criteria used by the Schools Commission in establishing centres were:

> the project should have clearly resulted from local initiatives;
>
> the centre was to be incorporated as a non-profit making body;
>
> the management committee should include a majority of practising teachers representative of teachers working or living in the area;
>
> the centre would be open to government and non-government teachers;
>
> the management committee would be an autonomous body, i.e. would appoint its own staff and control its own premises;
>
> the centre would be open to use by parents and other members of the community who would preferably be represented on the management committee (Davis 1981, p.6).

The Community Education Centre of Fremantle is one of four State centres funded almost wholly by the Schools Commission. Others are at Derby, Geraldton and Bunbury. Each centre is set up as an autonomous corporation so that locally interested groups can act to fulfill in-service needs, using resources from within their local school community. The centres have complete freedom of action, their only priorities being that they should respond to teachers, and to a less extent now than when they were first incorporated, that they should have community involvement. (Too much community involvement earlier was thought to have been detrimental to the educational content).

The task of each centre is to devise ways of working with teachers without any real guidelines and without any real consultation between centres. At the national level there is a loose federation which comes into being for national conferences and for some programmes of national significance such as the 15-16 Years Old Work report. There is no association at State level. At the local level each individual centre attempts to work with schools and communities not by actively seeking to intervene but by joining and supporting other structures invited to do so, e.g. The Community Taskforce which encourages parental involvement in schools.

The major recent activities in which the centre at Fremantle has been involved apart from the Community Taskforce, have been the setting up of a Learning Resource in the centre for visiting

teachers and schools, the setting up of a residential centre for country school children, involvement with work training schemes and with individual teachers in schools.

A problem for the centres is that they should not be seen to be duplicating activities provided for from existing resources. Another problem arises from the School Commission guidelines which stated that centres must always retain support from the teaching profession in order to qualify for funding. There is a difficulty here in evaluating how significant the contribution to teacher development has been. Local schools, according to the Fremantle centre's own evaluation of its effect, find it difficult to identify what real, valued and lasting effects the centre has made, although they do refer to the SCALE project of 1978 as an example of a project which had a significant effect. The centre appears to be at the stage of development where it needs to undertake a thorough analysis of its impact on the community, not simply because of the more stringent financial circumstances at present in which greater accountability is called for than was previously the case, but also because a thorough evaluation could provide a necessary blueprint for future direction.

Although there appears to be some fear that its impact has not been great, there is also the recognition that the centre has incorporated some of the most acceptable features of the models of teaching centres recommended overseas and has avoided the pitfalls of the British centres and of the Victorian centres which have not been able to maintain their autonomy from the Education bureaucracy. Education centres are said to combine school-focused and school-based curriculum development and in-service techniques. By far the most serious problem confronting all of the Australian centres appears to be the problem of attempting to attract more secondary teachers. This was a factor highlighted at the July 1981 national conference, (NCEC/SPATE National Conference, Adelaide) at which it was also suggested that centres were experiencing difficulty with the conflicting options of developing their own programmes and creating a sense of their own uniqueness to be made known to teachers as well as being responsive in a fluid and dynamic way to teachers' needs (Davis, 1981).

10.5 COMPARISON WITH OTHER STATES

As discussed in Section 8.0 Skilbeck (1977) observed that Western Australia at the time of his writing differed from the other states in its in-service provision in that there was a more highly developed inter-systemic functioning, the State development branch was more strongly directed towards employer initiation and evaluation was relatively ignored. Another more recent source of information about comparisons between Western Australia and other states is the nationwide survey conducted by Bassett (1980), also described in Section 8.0.

Bassett found that a higher than average number of Western Australian teachers had completed or were engaged in formal advanced in-service courses in the period under review (W.A. 20% compared to 13% nationally); in Western Australia there was a higher figure than the average for attendance at courses in school time for Catholic Primary teachers. With regard to responsibility for organising courses there was a relatively low figure for "own school" by government secondary teachers (10%) and a relatively high figure by the same group of teachers for "Superintendents" (46%). The W.A. and Australian percentages were

Responsibility For Organising Courses	WA	Aust.
Own school	18	23
Superintendents	27	12
State or Denominational (regional office (city office	28	24
Subject Association	7	6
Professional Association	13	20
Teachers Federation or Union	1	2
C.A.E's	3	4
University	1	2
Teachers/education centres	16	20

The pattern of emphases of in-service courses in Western Australia as in Australia as a whole appeared to be towards school development rather than individual teacher development, primary schools more so than secondary. The W.A. and Australian percentages were

	WA	Aust.
Whole school	22	26
Section of the school	19	13
Individual teacher	33	29

In Western Australia as in Australia the same emphasis on whole school development among Catholic primary teachers was evident (whole school 50%, section of school 19%, individual teachers 25%). This was not replicated with Catholic secondary teachers.

The major themes of in-service education in Western Australia as in Australia were

- curriculum
- teaching methods
- administration.

In Western Australia above average attendances were noted at curriculum courses by Catholic primary teachers; at

multi-cultural education courses by pre-school teachers; at handicapped child courses by pre-school and independent teachers; at teaching methods courses by primary teachers and Catholic secondary teachers; and at community relations courses by pre-school teachers and Catholic primary teachers.

There may have been changes of emphasis since the Bassett survey especially with the recent cut back in funding which may have affected inter-systemic participation. However, the survey is important in indicating that there is a high level of emphasis on school development rather than individual teacher development. It also indicates that superintendents have greater involvement in organising courses than is the case in the whole of Australia and the teachers/education centres are less involved. It does not provide information on sources of initiation of in-service education activities or on teacher attitudes towards change and whether changes have occurred as a result of in-service activity. These factors need to be determined.

It would appear that some of the other states have been swifter to react to recommendations embodied in the recent Schools Commission reports. In New South Wales in 1978 task forces were established to prepare strands of the In-service Staff Development Programme and in 1980 a survey of teachers was mounted which enquired into aspects of in-service education as well as into other areas of teacher education. As a consequence of the survey the Committee to Examine Teacher Education recommended in 1980 that each teacher should have five class-free days per year for continuing education, that additional study leave fellowships should be available and that provision should be made for the appointment of teachers to have responsibility for the development and follow-up of continuing teacher education within schools, that more adequate provision should be made for teachers in isolated areas or those who find present arrangements difficult (Committee to Examine Teacher Education in N.S.W. 1980, p.225). Victoria and Queensland had already carried out evaluation exercises and were implementing programmes as a result of their findings. In Queensland a new emphasis has been placed on developing local resource personnel who can support district and school-based in-service education.

The recommendations resulting from the Victorian evaluation included:

> that teacher education institutions take measures to ensure that teachers and employers of teachers are involved in the planning of both award and non-award in-service education programmes offered by such institutions (Committee of the Victorian Enquiry into Teacher Education, 1980, p.302);
>
> that employing and funding authorities should continue to co-operate in evaluating in-service education and in appropriate research projects (p.306);

that the right of teachers to regular periods of continuing teacher education be recognised and this leave to be at the rate of 13 weeks every seven years of service (p.340);

that medium term courses for teachers on periodic study leave be developed by the teacher education institutions in association with employers, teachers and community representatives, and that these meet the needs of teachers and the emerging needs of education, that these also meet the emerging needs of schools and that appropriate arrangements should be made to ensure that institutions give credit for appropriate medium term courses (12-13 weeks) towards particular formal qualifications (p.341);

that the Tertiary Education Commission should fund institutions conducting medium term courses on the basis of an amount that is one-third the recurrent funding for a full-time student per year (p.344).

The Committee was convinced that many of the needs of teachers and schools will be met by the provisions of medium term courses.

An unusual feature of Tasmanian in-service education is the Centre for Continuing Education which appears to be a successful form of collaboration between the Education Department, the Tasmanian College of Advanced Education and the University of Tasmania. This Centre provides part-time study programmes for practising teachers in in-service priority areas as well as courses leading to further qualifications. Tasmania is also the one state where a 'fading certificate' has been introduced to ensure that teachers keep abreast of the latest developments in education and thus their qualifications are constantly upgraded.

11.0 TRENDS OVERSEAS RELEVANT TO WESTERN AUSTRALIA

Early on in its member-wide survey of in-service education practices, the Organisation for Economic Co-operation and Development (O.E.C.D.) found that there was general agreement about the importance of in-service education and the need to give it high priority within national education policies, e.g. it stated "very high priority should be given to the expansion and improvement of in-service training as an investment in the future quality of the teaching force".

The growing importance of in-service education was said to result from three factors:

> "first it is inherently important that teachers of all people should continue with their personal and professional education;
>
> second, the rapid, extensive and fundamental nature of present-day change, technological, economic, cultural, social, political, makes it imperative for the education system in general and teachers in particular to review and modify teaching methods and curricula;
>
> third, for widely prevalent demographic reasons, the demand for new teachers is dropping sharply and the in-service needs of a stable teaching force become especially important" (O.E.C.D. 1978, p.11).

The drop in student numbers and cut back in educational spending on initial teacher preparation occurred earlier in some overseas countries than in Australia, e.g. by 1976 the United Kingdom was already in the throes of reorganisation of teacher education in response to a sharp decline in the demand for teachers (Nowotny, 1977, p.15). This gave impetus to an increased emphasis on in-service education, which however was modified later as public finance became less readily available. Changes in importance given to in-service education and in spending patterns affected activities in different countries in different ways.

The first really noticeable change in in-service education activity overseas resulting from increased interest in it, was in the United Kingdom where there was a sudden mushrooming of teachers' centres in the middle 1970's. These were a major innovation easily adaptable to different settings and they spread rapidly to other parts of the world including the United States, Japan, New Zealand and Australia. In different contexts the implementation of the concept of the centre was liable to differ. In the United Kingdom centres were critised for their lack of community involvement and token autonomy. Community involvement is now on the increase with encouragement from the local authorities, etc. but autonomy is decreasing with rationalisation and bureaucratisation in the movement towards a centralised system (Davis, 1978, p.106). This latter movement has occurred recently with restrictions on in-service education expenditure. As part of general tightening on spending of Public Finance, Local Education Authorities were requested to review their expenditure and the Government announced a closer monitoring of in-service funding (Thornbury, 1978, p.15).

In the United States centres developed originally as a response by teachers to professional dissatisfaction, and although these were moulded on the United Kingdom experience, they were less system oriented and more autonomous in their functioning. As in

the United Kingdom changes have occurred recently with cutbacks in education expenditure and pressures for accountability. Federal legislation in 1978 sought to enlarge the roles and functions of centres but with Federal involvement came a change of emphasis from "teacher directed decision making through teacher centre organisation and management to the efficiency and accountability of school systems" (Davis, 1981, p.9). Federal funding also brought about a trend towards more structured and predetermined activities, less innovative and exploratory professional development, more activities taking place outside school hours, poorer integration of in-service education and curriculum development, little intervention to improve school programmes, little attention to social aspects and slow development of advisory work (Davis, 1981, p.13).

In other member countries of the O.E.C.D. emphases have differed. In Sweden larger university-backed centres have been created. (The United States also has centres which collaborate with universities. This trend will be discussed later.) In Japan the centres are described as educational and training centres. France has developed a network of Pedagogical Documentation Research Centres and regards their contribution as important, whereas the Netherlands does not consider that its centres have a major role to play in the future (O.E.C.D., 1978, p.30).

In comparison with overseas developments, Western Australian Community Education centres are a recent introduction but are at the turning point where Schools Commission funds may depend on proof being obtained of their substantive contribution to in-service education.

Another model originating in Britain was the advisory model which again was taken up readily by other countries including Australia. In the United States the consultant role emerged. Innovations developed recently in the advisory and consultancy models include university-linked practical counsellors in Germany, school-based tutors in the United Kingdom and research and training co-ordinators in Japan. Beside the trend towards innovations in types of teacher in-service educators, a trend has also developed overseas towards a closer examination of the training needs of the training personnel. The Advisory Teacher services in Western Australia appear to be aware of a need for further activity in this area (McHaffie, 1980). However, recent cutbacks in funding will have to be contended with. These cutbacks have already affected the numbers of personnel engaged in advisory services.

The other major trend evident overseas has been towards school-based and preferably, school-focused in-service education. (School-focused implies that rather than being simply located in the school the actual initiation for the activity comes from the school.) School based in-service has been described as the most significant innovation in the new use

of traditional agencies (O.E.C.D., 1978, p.31), and appears to be accepted generally as a fruitful strategy for further development. This trend has arisen firstly because of the political motivation of teachers for more control of their own concerns, and secondly because of a desire for recognition from those in authority that teachers themselves know and can provide for their own in-service needs (i.e. an increased professionalism in teaching.) Thirdly there is the recognition by in-service providers that change is more likely to occur in the circumstances associated with school-based activity. In Sweden, study days have a school-focused orientation and in Japan school-based researchers are also in-service education co-ordinators. In the United Kingdom school-based activities have been encouraged and are often associated with curriculum development or research, whereas in the United States they are often associated with the consultancy role in the organisation development model. This model has had widespread application in the United States and elsewhere.

In Australia, educators and in-service providers are aware of the trend towards school-based, school-focused in-service education and the preferences for it shown by teachers (Ingvarson, 1979, p.18). The Schools Commission has emphasised its significance, e.g. describing the school staff as "perhaps the most important single grouping for developmental activities" (Schools Commission, 1975, p.185). It has also stated that the teaching profession should take a leading part in directing its own improved functioning (Schools Commission, 1978, p.89). However, as Ingvarson says of Australia in general, "it has been difficult to develop suitable practical models to follow...in particular, the two features of being school-based and teacher-initiated have been rarely combined" (1979, p.18). The Victorian In-service Education Commission is the outcome of one state trying to remedy this lack. Following the example set by the Ford project in the United Kingdom, V.I.S.E.C. is supporting classroom-based research projects in in-service education. In Western Australia the providers of in-service education seem to be aware of the need for a school-focus, but it is difficult to produce evidence of where such a focus is in existence to any great extent, although there would appear to have been some increase in whole school development or section of school development in comparison to individual teacher development.

One final trend which is in evidence overseas and which indicates a likely future direction for in-service teacher education in Australia, is the involvement of tertiary institutions in this field. In the United States and the United Kingdom as enrolments into pre-service education dropped drastically, it was suggested that resources and personnel from the tertiary institutions could be used for in-service education. According to the O.E.C.D. (1978, p.46), "the availability of experienced staff and valuable college resources freed by the reductions in initial teacher training were a powerful economic and logistic reason for strengthening INSET."

In the United Kingdom 20% of staff time in initial training institutions was allocated to INSET (O.E.C.D., 1978, p.16). Extended in-service courses were run and the institutions involved themselves in the appointment of professional tutors to schools. In the United Kingdom it is common also for tertiary institution staff and students to be used as a force to take over responsibility for a school for a week while staff are involved in in-service education. In the United States tertiary institutions have become involved in in-service education in innovative ways, e.g. in North Illinois where the university provides clinical experience, or supervision in a clinical situation, for experienced teachers. The idea has evolved from the pre-service clinical programmes originally provided by the same personnel. Moore (1978, p.161) described projects undertaken within the context of this model. Indiana State University has also been involved in co-operation with practising teachers in producing pre-service and in-service competency based learning modules (Summers, 1978, p.168).

In Australia staff and students of tertiary institutions, the former usually at Master of Education level, are playing a significant role in Queensland and Victoria in the Disadvantaged Schools Programme (Schools Commission, 1978, p.86). Their assistance has involved analysing needs, teaching in schools and running summer schools for groups of students. The Whole School Withdrawal Programme was another instance where Queensland tertiary institutions cooperated in providing extended courses for experienced teachers.

In Western Australia Bassett's survey revealed that only 3% of in-service teacher education courses were the responsibility of colleges of advanced education. However, this figure may be deceptive as teachers are not always aware of where responsibility lies. Much in-service education activity undertaken within the colleges may be on an individual rather than an institutional basis and is therefore difficult to identify and quantify. At present the W.A. College is planning to obtain more factual information in this area. While there is obviously room for increased involvement from the tertiary institutions, care would need to be taken to ensure that any increase did not interfere or detract from the success of existing activity.

A term appearing frequently in recent literature is the term 'collaboration'. It refers to the trend for different agencies to work together to provide the resources needed for in-service education. This collaboration has arisen with the demand for accountability and rationalisation of resources. The demand is in evidence in Australia. The Schools Commission (1978,p.89) referring to the Services and Development Programme, stated that "there is a need to develop closer working relationships between the Programme and the staff of Tertiary institutions engaged in the education of teachers, both in the planning operation and in

the construction of courses and to relate the Programme more closely to the education centres also funded under it". Also colleges of advanced education should, as pre-service student numbers dwindle, be able to engage "more strongly in continuing education and courses of varying length arranged under contract to those operating the Programme should be developed more energetically as supplements to year long courses carrying accreditation and funded through tertiary channels"(p.91).

Examples of collaboration already in existence in the United States are the teacher education centres which have evolved in Florida, Massachuetts and other states. The Tasmanian College of Continuing Education, already mentioned, provides an Australian example. In Western Australia one example which can be instanced is that Resource personnel, including colleges of advanced education staff are listed in a resource book made available to schools by the Teacher Development Branch.

In the United Kingdom Kahn (1977, p.31) describes collaboration in terms of setting up networks. Tertiary institutions could be a focal point in these networks provided they did not interfere with the work of agencies already involved in this area, such as, for example, in Western Australia, ISEC or the Teacher Development Branch. Greater involvement of tertiary institutions in the in-service area would expand the resources available for it in a time of financial stringency, but the tertiary institutions themselves would also benefit in being able to deploy resources not needed in the contracting pre-service area. Leader (1978, p.152) referring to the situation in the United States suggested that the survival of the colleges of education in the future will depend on their involvement in in-service education.

12.0 SUMMARY

It has been noted that the National Inquiry into Teacher Education (Auchmuty, 1980) placed a strong emphasis on the importance of in-service teacher education, finding that existing funding levels were inadequate and that the services were poorly coordinated. It recommended some increase in the provision and stated that if employers created a need for teachers to be retrained they should provide appropriate opportunities for the retraining. It never the less held that the responsibility for continuing professional development rested ultimately with the individual teacher.

The W.A. Committee of Inquiry (Vickery, 1980) recommended that indirect methods of funding should be increased, such as in the relaxation of restrictions on the use by tertiary institutions of recurrent funds for non-award in-service courses. As did the Auchmuty Committee, it placed the onus for professional

development largely on the individual teacher and the school staff. However, one other recommendation has implications for the W.A.In-Service Teacher Education Project. This was that employing authorities should assess the needs for continuing teacher development before establishing a long term policy to meet those needs. This review of the literature was initiated as a first step towards the assessment of needs.

As in most literature reviews, the first factor to emerge was the problem of definition. In spite of the increasing volume of literature on in-service education and agreement about its importance, there is according to the O.E.C.D. (1978, p.12) "much less clarity and agreement about the precise nature and aims.." The definition of in-service activity has created considerable debate over the last two decades and the terms used reflect changing attitudes. They also give an indication of the substantive factual problems in the field which received attention at any point in time. For instance, actual terminology altered. 'In-service training' became 'in-service education' and subsequently 'professional development'. An emphasis on the individual widened to embrace the whole school and eventually also the parents and the community associated with the school. The major problem revolved around the scope of the definition, relative to the activities subsumed under it. A broad definition is useful in providing a theoretical basis for looking at in-service education, but a working definition needs to be more restrictive to be of any practical use. The most urgent initial task for those interested in in-service education is to define and delimit the field.

In spite of the increase in the volume of literature, there remains a paucity of factual information derived from actual research. Therrieu (1980,p.4) suggested three categories in which patterns of information seem to be emerging and which could be useful in planning in-service programmes. These categories are

"1. What are the in-service needs of teachers and how might these needs be satisfied?

2. What programme strategies seem to be most often related to successful in-service programmes?

3. How can the effects of in-service programmes be evaluated?"

Needs for in-service education can be classified into those pertaining to education as a whole, those pertaining to the school and those pertaining to the individual teacher. Educational needs in existence at present arise because of change in society, including technological change, change in attitudes such as towards ethnic groups, handicapped children, etc., and most significantly, change in student numbers and consequent slow down of teacher turnover and lack of renewal in

the force. Schools' needs arise with changes in the population they serve or with changes in the systems which affect their functioning, such as arise from devolution of decision making to school level or from increased community involvement, etc.

Individual teachers' needs can be dealt with as needs of specific groups of teachers such as of those assuming promotional positions or teaching new curricula. One way to group teachers according to in-service needs derives from a career profile which may relate as well to vocational commitment and attitude to in-service education. The literature indicates that in this sort of categorisation and with no influx of newly appointed teachers, the grouping which has most need of in-service education may be that of the mid-career teacher. This is the largest group and the group least interested in in-service education. It consists of teachers who have established control and efficient routines in their teaching but who do not analyse the needs of individual children or use remedial or preventive methods, and who fear change.

Because research has not been directed specifically at the mid-career teacher and his needs in in-service education, it is necessary to look at the perceived needs of teachers in general and to draw implications from these for the mid-career group. Overseas and Australian surveys indicate that teachers want in-service education which relates directly to teaching content and method, i.e. to the classroom situation. Teachers will not participate in, or at best, will not appreciate programmes in areas not perceived by them as being areas of need. Providers of in-service education almost universally declare that teachers do not know their own needs. From the literature it appears that it may be more the case that teachers are not adequately communicating their needs and that new methods of communication are needed. A needs approach is itself questionable when needs are determined by people other than the teacher himself and are regarded as deficiencies in his teaching competency. Teachers must participate in determining their own needs.

The way needs are determinated has implications for models of in-service education. Models which are preferred by teachers and which are most likely to bring about change, are those which are school-based or school-focused, functional to the work situation, located at the school and initiated by the teachers. An assumption which can be made from this is that school principals may be key figures in change and in-service education activity may need to be directed towards strengthening their ability to cope with this new role. Also some of the most successful models for in-service activity may be those which are associated with classroom research.

An analysis of the results of evaluations of in-service activity carried out in Australia indicates that teachers generally regard in-service education as essential. Some assumptions can be made from the surveys about needs of teachers and about

preferences by teachers for particular models. However, an examination of the actual instruments used in evaluation points to a need for more variety in instruments, especially for the use of more innovatory ones. It can also be asserted that evaluation, both formative and summative, should become an integral part of any in-service education programme.

The three processes, assessment of needs, selection of strategy or model, and evaluation, are the components of an action plan for in-service education. They should be regarded ideally as part of a cyclic process of continuing professional development in which evaluation leads back into needs assessment and the formulation of new strategies.

An overview of the situation in Western Australia draws attention to the increase in the middle and late 1970's in the number and variety of programmes offered from various sources. It would appear that major in-service providers, such as the Teacher Development Branch of the State Education Department, the Services and Development Committees and the Catholic Education Commission are aware of innovations in in-service education, of trends occurring overseas and of knowledge now available regarding areas of teacher preference and most effective strategies for change. Evidence suggests that community involvement and inter-systemic cooperation are strong points in the government provision of in-service in Western Australia, but that there has been more emphasis on system initiation than teacher initiation and there has been very little local evaluation either of teacher needs, teacher preferences or of programme effectiveness.

The last two years have seen a decrease in federal funding for in-service education and the latest Schools Commission report for the Triennium 1982-84 recommends a change in direction of funding away from in-service education programmes as set up by the Services and Development Commission towards programmes of school improvement. Such a change would reinforce the trend towards school-focused development. There is also a recommendation in the report that colleges of advanced education should be released from the regulation limiting their spending to 1.0 percent or $50,000, whichever is the greater, of their recurrent grant for non-award courses. Such a relaxation would allow colleges to become more involved in in-service education even if an increase in direct funding were denied to them.

An examination of trends overseas, particularly of examples of involvement of tertiary institutions in in-service education, points to the avenues which could be open for an increase in their involvement locally. Opportunities could be made for staffs of these institutions to work co-operatively with staffs in schools, to plan and organise staff development activities which retain their school focus. Colleges have the human and material resources which could be used by schools to enable such programmes to succeed. If as Cameron suggests (1981,p.21)

"professional development should not be concerned so much with shaping people but more with providing an array of resources on which people can draw" it may be the province of the tertiary institutions to provide these resources. Colleges could also become the focus in a network of providers of in-service education to coordinate and rationalise the provision where this task is not already performed by other agents.

It can be argued that benefits would accrue both ways from collaboration between schools and tertiary institutions. Schools may not have the expertise or the resources to carry out their own programmes efficiently or successfully. Colleges may need to engage in other activity such as in-service education to offset the decline in activity in the pre-service area. According to Cameron "with a few notable exceptions, Universities and Colleges of Advanced Education have done little more than offer formal award courses to teachers. What is now required is for the staff of these institutions to work co-operatively with staff in schools to plan and organise staff development activities which are an integrated part of the problem solving and improvement efforts within schools. Most tertiary institutions in Australia offer courses in teacher education. Within these institutions are many staff with particular expertise who could provide valuable assistance to schools struggling to plan structural and curricula reform"(p.21). Without access to advisory and support services most schools will be unable to conduct effective school services and mount successful programmes of school-based staff development. Tertiary institutions may find it to be also in their own interest to provide these services.

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